

CRISIS  
AN ASPECT OF CAPITALIST DEVELOPMENT

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## ABSTRACT

This thesis puts forward the idea that crisis is a 'natural' aspect of capitalist development. It thus locates the causes of the current crisis in the structure of the post-war economy and exonerates individuals - workers, management and politicians - whose actions are seen as responses to economic conditions, and not their ultimate cause.

Why doesn't the economy do its job properly? In the history of economics almost all the answers to this question sit on the continuum between 'too much free-trade' and 'too much state intervention'. The argument here attempts to transcend this controversy by demonstrating that the free-trade economy leads 'naturally' to both monopoly and crisis, and so eventually necessitates intervention, which itself cannot alleviate either tendency.

A model is developed to show the situation under which balanced growth could conceivably follow an uninterrupted path. When the model is applied to capitalist reproduction in a capitalist environment, however, economic expansion is seen to entail factors which become the causes of crisis. These include: underconsumption, over-accumulation of capital, disproportionality, and the tendency of the rate of profit to fall.

This multifactor causal model of crisis is then applied to explain the regular oscillations in the rate of accumulation - or the industrial cycle. Finally, the task of explaining why the current series of industrial cycles is articulated in a continuing downward trend is begun. This involves an account of the role of the movements of finance capital and of inflationary credit expansion in disenabling a proper recovery in the period after 1974-75.

## Chapter I

### INTRODUCTION

In the period after the Second World War the leading nations of the capitalist world, including Australia and New Zealand, experienced a long-run and more or less uninterrupted trend of economic expansion. There were still fluctuations in national rates of growth, but these were unsynchronized and incidental to the general trend, and could in any case, it seemed, be effectively countered with Keynesian governmental intervention in the national economies of the developed world.

The significance generally attributed to this period of history by those who lived through it was false on at least two counts. First, on the surface there was nothing to suggest that the social stability and well-being experienced by a large number of social groups was anything but permanent and burgeoning. Fifteen years ago this position became debateable, ten years ago it was stripped of all apparent tenability by economic events in the Western world, and today it has given way to its opposite among many social groups - pessimism and critical criticism of all existing and foreseeable social structures and arrangements.

The second false appearance presented by the long post-War boom was that the more advanced countries showed to the less advanced their own future, and the same was supposed to apply to more and less fortunate social groups. The enormous progress of the West turned the attention of economic trouble-shooters to the underdeveloped and politically less stable regions. 'At home', the reformers also began to tackle the perceived problem of regional and sectional disparities. However, if we had, in the first place, taken up the hypothesis that the advanced groups and nations progressed at the expense of the others, then nothing would yet force us to relinquish this opinion.

Thus, the good aspects of the long boom, which were assumed to be permanent were, in fact, temporary; and all the failings and drawbacks of capitalist development on a world scale which were thought to be temporary and reparable have not yet been alleviated or repaired. As the economic banes of over-production, contraction, unemployment, rising costs, idle capital, stagnation and decline are reflected in the problems and responses of the bourgeois state in the form of borrowing, deficit

financing, balance of trade problems, restructuralist policies, austerity programmes, legitimation difficulties and the flexing of the repressive apparatus, etc., what seemed incidental to the social development in general now appears inalienable, or at least a hundred times more difficult to shake off, and the stability which seemed inalienable has now proved to be incidental.

This raises questions about the economic and social arrangements by which we live. In a word, why doesn't the economy do its job properly on a national or a world scale?

Two types of answer are possible for this question depending on how we interpret it. The first treatment, taken up by all official economic science, is to ask what individual aspects of the economy deviated from the ideal model of the mixed-enterprise system and thus disabled prosperous growth in the 1970s. So far as an answer can be arrived at in this inquiry, it is hoped to piece the system back together in an informed way and turn the ugly duckling back into a swan.

The other way of asking the question does not interrogate any particular aspects of the post-War economy but examines the capitalist economy as such for an answer. Instead of asking why, for instance, the New Zealand economy could no longer act as a proper mixed-enterprise system after the long boom, we are now asking why this particular type of economy, i.e., the capitalist economy, cannot satisfy the general material needs of humanity for which it was 'commissioned'. In this case we are questioning the capitalist mode of economic organization in its purity, and not lamenting deviations from it. The question "why doesn't the economy do its job properly?" thus asks what it is about capitalism that makes it inherently unsuccessful in the balanced and even developed production and distribution of material wealth in different countries, regions, and social groups.

The first formulation of the problem bore no fruit in the period after the generalized recession of 1974-75 and still offers little understanding of, or control over the economic phenomena of our times. A general declining trend exhibiting oscillations continues independent of economic planning and official economic science. Recovery is greeted with pleasant surprise, recession is met with mournful resignation, the same indicator at the same time may be taken to predict either of these, and the extrapolation of empirical trends is often more accurate than the application of the accumulated economic knowledge to the problem.

The major debate as to why the economy is not successful has not changed fundamentally in 150 years. It is the controversy between the free-traders and the state interventionists. One side explains the failure of the capitalist economy in terms of excessive government meddling in economic affairs at cross-purposes with the "natural" laws of the market. The other side accounts for this failure precisely by the lack of regulation, or the wrong sort. This crusty old debate is, however, as fruitless as the general perspective of which it is a part - bourgeois economics.

The transcendence of the free-trade/interventionism debate requires only the recognition that free trade, or competitive capitalism, leads naturally on the one hand to monopoly, the opposite of free trade, and on the other, to problems of reproduction of 'capital as a whole', and thus to state intervention and economic planning. (These propositions will be argued further below.) From this position it becomes clear that the problem is not with the way the system is administered, but with the nature of the system itself. In fact, it seems likely that the economic structure expresses itself through, or determines, the form of administration. The problem is thus structurally embedded in the system and is not due to independent or external causes.

This brings us to the second formulation of the problem, which is the one taken up in this thesis. The question is, why doesn't capitalism perform those functions which an economic system surely exists to fulfil, viz., the satisfaction of material wants in the production and distribution of material wealth? Why does it take one step forward and two steps backward? How are crises structurally determined under capitalism? By defining the problem in this way, I do not mean to say that economic difficulties cannot arise on a capitalist basis for other reasons, that is, for reasons other than the capitalist basis. But it is immediately clear that these causes would be incidental to capitalist crisis, and would be a proper subject for the type of economic science developed in official schools.

The investigation of capitalist crisis, which means for us the crisis arising out of the capitalist economy itself, could, even given this definition, still proceed in two ways. We can distinguish between an empirical and a theoretical mode of inquiry. An empirical investigation starts by looking at the crisis and its various expressions in the real world. It focuses on the concrete phenomena which make up the crisis, and

documents or measures trends in these. The empirical approach, however, meets with certain difficulties in understanding the crisis. In the first place, by looking directly at these phenomena we have already presupposed that we know what we are looking for. On the other hand, of course, it is highly unlikely that we will find agreement on the questions of whether there is a crisis, and in what it consists. In that situation it becomes clear that each person's opinion is no less based on intuition than anyone else's.

Second, no matter how long we look at these phenomena we believe to make up the crisis, there is ultimately no reason to expect that one's powers of observation are so far superior to one's fellow observers as to see what has been missed by generations of economists. The phenomenal world has no special secrets from the normally observant person. The really difficult questions are whether some set of phenomena constitutes a crisis, which ones are in the set, and what are their causes. If the answers to these questions followed from observation alone, mankind would have understood and corrected the failings of the economic system long ago.

Finally, when the bits and pieces of the crisis are treated individually and separately one from another, presumably to arrive inductively at the organizing principle behind them all, there is a danger that the connecting thread will never be found because in the process of examining each aspect of the crisis individual, separate determinations for them will be found. At that point we have returned to the bourgeois school, which sees the crisis, not as inhering in capitalism, but as the aggregate of problems in achieving "proper" capitalism.

The only correct starting point is, then, the theoretical one. A theoretical analysis begins with assumptions about the nature of the object of study and its development. Being conscious of the theoretical basis of our conclusions about the nature of the system of social production, elements of a crisis in it and the causes of these, we avoid the lacunae in the empirical approach. We do not "presuppose", but explicitly "theorize" the nature of society and of crisis. The causes of crisis emerge not only from the observation of concrete phenomena but from the significances and relations we attribute to them theoretically. We begin, in other words, with the connecting thread, or theory of crisis, and arrive at its individual links deductively.

This approach, of course, is not without its own problems. Foremost, we might note, is that the certitude of the theory depends on the validity of its assumptions. Even so, we are better off when we admit the theoretical underpinnings of observation, since we thereby move one step closer to self-consciousness and one step further away from unmindful commonsense intuitions about the social world. The fact remains, however, that, given the total consistency of our theory, if the 'hardcore' assumptions are wrong, the theory will be lacking. How are we to ensure that the assumptions on which we base ourselves are not mistaken?

The answer to this question is that beyond certain limits we cannot substantiate, let alone prove, our assumptions right off. There are no instant standards of rationality where assumptions are concerned. In the last analysis, only the longer-run developments of the theory and their correspondence with reality can reflect favourably on the 'hardcore' propositions. Yet, even in the longer-run we must be prepared to accept that the apparently fruitless theory might suddenly yield explanations of hitherto counter-evidence. Such was the case with Newtonian mechanics, which transformed numerous anomalies into corroborating instances with consistent developments which accounted for these. On the other hand, a theory which consistently provides explanations of phenomena may reach an impasse and be unable to account for phenomena newly considered. Such was more recently the case with Mechanics in respect of its inability to account for the perihelion of the planet Mercury.

The upshot of this is twofold. First, it is more likely that we will yield fruitful results if we take up an already existing theory, or slot into an on-going research programme, i.e., one that has at least had some opportunity to demonstrate its worth. Second, the choice between theories will not be completely rational and will therefore have other determinants beyond the realm of science.

Given that as I have already stated, I wish to advance the idea that crisis is a natural aspect of capitalist development, the Marxist theory seems the logical vehicle for this, and indeed, both this thesis and its mode of advancement must logically arise from the same general assumptions and view of the world.

The approach taken in this thesis comes out of all the considerations covered so far. Three broad points have been made: 1) that the crisis for us means the crisis arising out of capitalism, 2) that the starting point



must be a particular theoretical perspective, and 3) that that theory is Marxism. These points recommend the following order of presentation. I begin in Chapter II to set out the Marxist conception of the system of capitalist production. I try to cover everything that Marx saw as essential to capitalist society. Even here, in the presentation of the capitalist mode of production, a tendency toward decline is present - the tendency for the rate of profit to fall.

The surprising thing about this tendency, however, is that it has not found more drastic expression in the history of capitalism. In Chapter III we look at the ways in which particular capitals have resisted the tendency of the rate of profit to fall, and the way that this has shaped history. Chapters II and III provide a knowledge of the nature of capitalism, of what it consists in the Marxist view, both logically and historically. They are also concerned with the tendency of the rate of profit to fall, which is the first major factor relevant to crisis.

Having arrived at a conception of the system of capitalist production it is possible to set out the logical requisites of smooth, uninterrupted reproduction and growth. In Chapter IV, I present Marx's reproduction schema and then try to elaborate the inherent flaws in this schema (i.e., which in reality correspond to problems of reproduction) when it is applied to production on a capitalist basis, in a capitalist environment. The factors discovered here complement the tendency of the rate of profit to fall as the causes of capitalist crises.

In Chapter V, I begin to look in more detail at the structuration of real crises under capitalism. The first point of interest is the regularity of crises every 7-10 years. The periodicity of crises, or the industrial cycle, can also be explained on the basis provided in Chapter IV. Further points of interest are the frequency, amplitude and shape of industrial cycles, and trends in these over time. The explanation of such phenomena can only begin to take shape here. I begin to discuss how they are influenced by the credit system and the regulation of the nation-state, and by the movements of finance capital.

Finally, in Chapter VI, I summarize the argument of the thesis, and present some conclusions about the future of those societies in which the capitalist mode of production prevails, especially New Zealand. One major conclusion is that while the short term economic prospects are determined by purely economic factors, i.e., are predictable in economic terms, the

longer term holds no such certainty, and this is reflected in the 'short-sightedness' of bourgeois economic observers. In the long run, current economic trends cannot but provoke political turmoil in both the developing and underdeveloping countries. The political processes thus set in motion, will, in turn, determine economic prospects in the period beyond. It is my belief, therefore, that it is time to begin formulating political programmes which will temper the force of this eruption with far-sighted and progressive direction. The ultimate aim of this activity is to bring into being an economic order which avoids the rigours imposed by the capitalist system of production, and especially one aspect of this - crisis.

Such a conclusion may seem untenable to many readers, who view the current social and economic order as natural and eternal. However, I hope this thesis will help provide a better understanding of the present crisis from which will follow an appreciation of the need for transformation. In this way, the present work takes as a guiding thread the following words of Ernest Mandel:

The present crisis should make it easier to extract the working class from the grip of bourgeois ideology, for it is tearing off the veils that had partially concealed the real face of capitalism during the period of relative prosperity. The crisis thus favours a rise in proletarian class consciousness, which will stimulate an anti-capitalist struggle. But if the weapon of class consciousness is to be rigorously scientific, it must entail neither lie nor legend nor myth but must be based on the real facts and their explanation. Such is our ambition. Such should be the ambition of all Marxists, for whom only the truth can be revolutionary.

(The Second Slump p.8)

## Chapter II

### THE TENDENCY OF THE RATE OF PROFIT TO FALL

Much of this chapter is concerned with the exposition of the ideas about the nature of capitalist production which Marx sets out in volume one of Capital. The idea of the tendency of the rate of profit to fall, and the presentation of the law, reach their full development only in volume three of that book. These two parts of Marx's work, however, are entirely consistent as I hope my exposition will show. It is important to begin with capitalist production, for I wish to argue that starting from that basis we arrive at capitalist crisis, i.e., crisis can be explained by capitalist production itself.

The immediate conclusion from an examination of capitalist production is the law of the tendency of the rate of profit to fall. Ultimately, other tendencies toward crisis will be derived from the same basis. The investigation must therefore proceed stepwise from Marx's basic premises. Hence, in this chapter I try to explicate the laws which Marx set out at the most abstract level.

Disentangling the abstract laws, especially in Volume I, is not always a simple task, for the analysis is intertwined with the explanation, and this has the critique mixed into it. Since Marx does succeed in connecting up essence and appearance, abstract and concrete, all the internal relations revealed seem indispensable in coherently summing up the whole. It is otherwise with Volume II. Mandel gives the following quotes from Engels in his 'Introduction':

'The second volume is purely scientific, only dealing with questions from one bourgeois to another' wrote Frederick Engels to the Russian populist, Lavrov, on 5 February 1884. Seventeen months later, he told Sorge: 'The second volume will provoke great disappointment, because it is purely scientific and does not contain much material for agitation.' Finally, ...he wrote to Danielson: 'I had no doubt that the second volume would afford you the same pleasure as it has done to me. The developments it contains are indeed of such superior order that the vulgar reader will not take the time to fathom them and to follow them out. This is actually the case in Germany where historical science, including political economy, has fallen so low that it can scarcely fall any lower.' To them the second volume will always remain a sealed book.'(1)

What Engels refers to is that the actual written material that Marx left behind, and from which he compiled Volume II, contained only scientific inquiry culminating in the abstraction of laws, but lacked the corresponding explanation (or 'popularization' as Marx called it), which is left to the reader to provide, thereby rounding off the scientific work and thus 'fathoming' the abstract laws and 'following them out'. The procedure adopted here in relation to Volume I is quite the opposite. We have to disentangle the abstract laws of Capital from the explanatory material.

## 2.1 SIMPLE COMMODITY PRODUCTION

I begin with simple commodity production because in this chapter on profits we have to show how the pre-conditions for the historical emergence of profits developed.

When I use the term 'simple commodity production' here I am referring to an abstraction which Marx used and not a neatly identifiable historical mode of production. Ronald Meek writes: "Neither in Marx's case nor in that of Smith was the postulated pre-capitalist society intended to be an accurate representation of historical reality in anything more than the broadest sense....It was not a myth as some critics maintain, but a mythodology."(2)

Strictly speaking, Capital is not concerned with why capitalism developed, but only with the capitalist mode of production as such. Yet, to demonstrate the laws of development of capitalism adequately, Marx must discover how they have developed historically. The presentation of this discovery must take a short-hand form if it is not to be treated as a separate topic. Thus, 'simple commodity production' represents, in an abstract way, the historical womb from which capitalism was born and so embodies only what is logically necessary to demonstrate its historical development. That is, it contains only such conditions as would give rise to the possibility of capitalist production.

Why does an adequate demonstration of the laws governing capitalist production and exchange depend on an account of their historical development? Marx begins Capital thus: "The wealth of those societies in which the capitalist mode of production prevails, presents itself as an immense accumulation of commodities, its unit being the single commodity."(3) From this we can infer that capitalist production is

commodity production. Commodity production is production for exchange (rather than direct consumption), and thus capitalist production is, at least in part, production for exchange. However, it would be an unwarranted inference that commodity production is capitalist production. Hence, it is incumbent upon Marx to treat the more general case first, to set the broad parameters for the understanding of the particular.

These "parameters" are of the utmost importance. To arrive at capitalism in its pure determination several conditions must be met, i.e., production and exchange in the capitalist mode must be ordered, and this order must have an historical as well as a logically imposed element. The logically derived conditions for capitalism are: 1) the dual nature of the commodity, 2) the labour theory of value, 3) the law of value, 4) the commodity theory of money, which, taken together allow, 5) price determination. There is also the implication, however, that in the historical development of commodity production these conditions, 1 through 5, came successively into being in pre-capitalist times, although not mechanically one after another. Just as Marx abstracts "logically" from the imperfections in the operation and application of these conditions at any one time, he also abstracts "historically" from their overlapping and zigzagged development and its multifarious expressions.(4)

If Marx had a particular question in mind when he wrote Part 1 of Volume I of Capital, it might have been: What conditions would have to develop before commodity production and exchange could be conducted on a rational (i.e., non-accidental) basis. It is in this light that the following must be understood.

That everyday item, the commodity is, according to Marx, a very queer thing. It has a dual character. "Every useful thing, as iron, paper, &c., may be looked at from the two points of view of quality and quantity."(5) When we look at a commodity from the qualitative point of view, we distinguish different kinds of commodities. A commodity may be useful for this and that, but of no utility for the other. We may distinguish the different qualities which make an object a turner of soil, a flyer through the air, or a giver of shelter. In so doing we distinguish the utility of this object as opposed to that, its specific usefulness - its use-value.

From the quantitative point of view commodities also vary in value. The value which we must produce in exchange for an aeroplane is greater than that needed to acquire a house. Put another way, we must exchange several houses against one plane. This purely quantitative aspect of the commodity is its exchange-value. To be exchanged an article must be useful to someone other than its present owner. From the use-value of the commodity, however, we cannot derive the quantitative ratio in which A will be exchanged for B, as the use-value expresses only the substance and quality of commodities. In its independence from the use-value of a commodity, the exchange-value at first appears to have no determinant moment. Not only this, but it varies across space and time and thus seems, on the one hand, totally accidental, and on the other inherent to the individual, isolated commodity in respect of the lack of a common denominator of value for commodities in general. Now, if the exchange value of a commodity cannot be determined this is a mortal impediment to analyzing commodity production and exchange, for one pre-condition in the abstraction of laws, of course, is precisely that the object is governed in a law-like manner.

If we were to found a society whose wealth consisted only of these isolated simple commodities, the barest rudiments of the commodity, we could only practise the rudest forms of exchange. We would have only accidental exchanges where we really had no grounds to predict whether an object will be realized as a commodity in exchange, or what substance or magnitude it will be exchanged for. It is otherwise under capitalism where almost all products are produced for exchange, all sellers receive money in exchange, and prices are set at the factory dispatch. Our isolated commodity lacks 1) a determinant relative value, 2) a mechanism for the social recognition of its relative value and calculation of equivalence, and, 3) a universal equivalent form of value, or money, for the transformation of values into prices.

The first requirement then is for a determinant relative form of value. In the first chapter of Capital volume one Marx sets out the formal requirements of a theory of value:

1. It must isolate a denominator common to all commodities such that, when we express a value relation  $1 \text{ DC } 8 = 200 \text{ State houses}$ , the equation denotes that "there exists in equal quantities something common to both. The two things must therefore be equal to a third, which in itself is neither one nor the other. Each of them, so far

as it is exchange value, must therefore be reducible to this third."(6)

2. This common denominator cannot be counted among the natural properties of the commodities for their physical dimensions, chemical composition, and so on, can contribute only to the use-value of the thing. The exchange-value abstracts from the use-value, it is only a quantity and not a quality of a commodity.

According to Marx, the only property that satisfies the second requirement is the property of being products of human labour. Apart from the use-value of commodities this is their only common property.

We must look a little more closely at the first requirement, for labour too has both a qualitative and quantitative aspect. From a qualitative point of view labour contributes directly to the use-value of the product. As the plough and the house are qualitatively different use-values, so also are the two forms of labour which produced them, blacksmithing and carpentry, qualitatively different. This qualitative difference signals that the labour as a whole cannot play the role of common denominator. From the side of exchange-value, the use-value of a thing disappears from sight and along with it, evidently, so must its property of being the result of this or that type of productive activity. This second abstraction yields as common denominator one homogenous sort of labour, human labour in the abstract, labour exercised without regard to its particular mode. The exchange-value of a commodity therefore depends on the amount of abstract labour embodied in it. The quantity of labour in turn depends on the time through which it was exercised. Hence, on this time depends the magnitude of value in exchange of the commodity.

The historical stage of development of the commodity at which the labour theory of value was realized, would give rise to the possibility of barter. This barter has some non-arbitrary basis, since the relative value of commodities can be calculated in terms of embodied labour. However, when we broaden our view to branches of industry or the total social commodity stock, we meet a peculiarity. For each individual act of exchange the relative values of the commodities would have to be calculated, since commodities identical in every other respect may embody different quantities of labour. This would lead to absurd possibilities. Among others, abstracting from seasonal and regional differences, etc, 5 lbs corn may for example be equal in value to 15 lbs corn. Secondly, we

see the correlate that the more idle and unskilled the labourer the greater value he creates because the more time he spends casually and ineptly forming the product. If human labour fulfils requirement "1" above then it seems that Marx's theory breaks down at the Macro-level. If, on the other hand Marx's theory is to work at the Macro-level, labour seems not to constitute a common denominator of exchange-value.

In order to 'de-accidentalize' commodity exchange at the social level, Marx formulates the Law of Value as follows: "...that which determines the magnitude of the value of any article is the amount of labour socially necessary, or the labour-time socially necessary for its production." (7) This follows from the view that the value of the 'total social commodity' must be calculated on the total social labour-power expended. This one mass of labour-power is composed of units each of which "...is the same as any other, so far as it has the character of the average labour-power of society, and takes effect as such; that is, so far as it requires for producing a commodity, no more time than is needed on an average, no more than is socially necessary." (8) The consequence is that the value of things, the ratio in which they are exchanged, depends on the different amounts of socially necessary labour-time required in their production. The socially necessary labour-time depends on the average productivity of labour in the society. Now it is clear that an unskilled workman is less productive than the average and thus must expend greater than the socially necessary labour-time in the production of commodities, and yet these will exchange only "at value", i.e., for commodities embodying the socially necessary labour-time.

So far we really have only the possibility of barter. Production for exchange meets peculiarities in a barter system. First, the producer must produce exactly the product that the alienators of the commodities he wants wish to acquire. Across society this leads to compound logistical difficulties. Second, in many exchanges the equivalent form (or purchasing commodity) will be different and so the continual recalculation of exchange ratios would be required. Thus, it is difficult to see that commodity exchange and production would develop very far without money.

The development of money is the development of a commodity which acts as a universal equivalent expressing the relative value of all other commodities. In Marx's time the primary money commodity was gold, although silver and other precious metals also served, as have other commodities e.g., livestock, in other times and places. (9)



In the equation: 1 plane = 200 state houses, the equivalent value appears on the right-hand side and expresses the relative value of the plane in houses; that is, its equivalent in houses. A universal equivalent form appears on the right-hand side of every possible value equation, such as:

1 plane = 500 lbs gold

1 house = 2.5 lbs gold

1 plough = 0.5 lbs gold

It is able to perform this function precisely because it too is a commodity and as such has a value determined by the labour-time socially necessary for its production. Now the value of a commodity expressed in money is its price, which meant the quantity of gold that embodied an equal amount of socially necessary labour. Thus, prices are determined, quite simply, by the law of value in the presence of a universal equivalent form of value. On the basis sketched here simple commodity production, production for exchange, can be carried on. Moreover, with the single (although crucial) exception of a free labour army, the stage is set for the emergence of capitalism.

Let us go back through "history", logically, as it were. To conduct commodity production and exchange on a non-arbitrary basis and in its fully formed mode we need price determination. Price determination requires a universal equivalent form of value which is determinant. Calculations of equivalence require a relative form of value which is determinant. The relative value cannot be equivalent in price as this would result in a tautology (i.e., a price of \$4 results from the price of the thing being \$4). Value in both its relative and equivalent form is determined by the labour-time socially necessary for the production of a commodity. Hence, the measure of value is crystalized labour. Finally, to be recognized as a commodity an article must be exchanged and must therefore have, besides a determinant magnitude, a value in use to its acquirer, and no usefulness (except in exchange) to its alienator. Thus the development of commodity production presents itself as the progressive domination of exchange-value over use-value in the production of material society.

Once the results of the analysis of simple commodity production are treated as givens, we have moved to a new level of analysis. So far we have given commodity production a rational basis. The final ripening of the price-form alleviates the previous accidental character of exchange

and rationalizes production in the sense that it need not now be arbitrary. Yet, there are flaws in this characterization of commodity production once we apply it to capitalist society. The very means by which we make it determinant, the dependence of exchange ratios on the relative socially necessary labour-time of commodities, seems to preclude the possibility of profits. If things exchange at value, then no one loses and no one gains any more than they had to begin with. If prices are determined by value, then over-pricing is on the whole precluded. The solution to the question of profits is Marx's single most celebrated achievement.

## 2.2 CAPITALIST PRODUCTION, PRODUCTION OF SURPLUS-VALUE

What distinguishes capitalism from commodity production as such, is accumulation. Capitalist production is production for exchange, but exchange in this sense under capitalism is primarily a means of realizing profits, which allow the expansion of capital. Yet profits do not arise in exchange, for if they did, the laws and relations we have found in simple commodity production would be invalid, and the basis on which commodity production stands would dissolve. Neither could generalized commodity production or its analysis proceed in that case. To discover how profits arise we look in this section at the circuit of capital as it occurs with reference to each individual capital, and especially at one phase of the cycle - production.

The process of circulation is made up of buying and selling. Buying is the exchange of money for commodities (M-C, where M stands for money and C for commodities), selling is the exchange of commodities for money (C-M). The simplest form of circulation is selling in order to buy, or C-M-C. This circuit is characteristic of simple commodity production where the producer sells his goods in order to buy other use-values. The second possible circuit is M-C-M. This circuit starts and finishes with money, it is buying in order to sell. In the simple circuit, the object of exchange is clear: I exchange my commodities which are of no use to me, through the medium of money, for commodities which have use-value to me. I consume these commodities, and they fall out of circulation. In the second circuit, M-C-M, however, the result (money) is still value in circulation, and it is not a use-value to me. First, then, the second circuit which begins and ends with money (M-M) can have no other purpose than a change in quantity, for a change in quality is ruled out. Money is

money. I would hardly throw money into circulation if my object was to draw the same quantity of money out of circulation. Second, drawing an increment on my money, represented by  $M'$ , appears as an end in itself, for in the process  $M-M'$  we never leave the sphere of circulation and so admit no interest but the incrementation of this money. Third, having admitted no interest apart from the incrementation of money, and being left in the sphere of circulation at the conclusion of the circuit, the newly expanded value can have no part in the circuit  $M-C-M$  except to seek further incrementation. If it turns to consumption it falls out of the circuit and out of our consideration.

The increment of  $M'$  over  $M$ , Marx calls surplus-value. The augmentation of the original value, or the addition of surplus-value, signifies that it has acted as capital. The expression  $M-C-M'$  is thus seen to be the general formula of capital. The conversion of money into capital is the process of expansion of value as a never-ending end-in-itself. Capital has no inherent limits.

But how can the expansion of value occur in circulation? We have seen that circulation is composed of two antithetical modes of exchange, buying and selling, and that value is not created in exchange, for things exchange at value. Hence, the expansion of value, the formation of capital, must take place both within circulation, and at the same time outside that sphere!

We know that the money which buys the commodity ( $M-C$ ) is its value equivalent. We know also that the commodity which buys money ( $C-M$ ) is its value equivalent. But in the formula  $M-C-M'$ , the value of the second exchange is greater than the value of the first. We can infer that the change takes place in the commodity itself. However, the change cannot be the result of the mere circulation of the commodity for a commodity cannot have two values, which is only to repeat that surplus-value is not created in exchange. The change must therefore stem from the use-value of the commodity, or its consumption. This conclusion is only satisfactory if we can find a commodity whose consumption has the peculiar result of creating value. Such a commodity does exist according to Marx, and that is labour-power. "By labour-power or capacity to labour is to be understood the aggregate of those mental and physical capabilities existing in a human being, which he exercises whenever he produces a use-value of any description." (10)

In the first place this creation of surplus-value depends on the availability of labour-power, a condition not posited in the dynamic of simple commodity production. Availability of the commodity labour-power has a two-fold meaning. First, the labourer must be free to sell his or her labour-power as a commodity. The capacity to labour must therefore be recognized as the private property of the labourer, which would necessitate its purchase for a given length of time. Second, the labouring class must have no commodities to sell other than its labour-power, which ultimately means its members do not possess means of production. Those falling within these conditions form a free labour army.

Clearly, the consumption of labour-power is not the whole solution for it takes us out of circulation completely. We must recognize that labour-power cannot be consumed except in a labour process. When buying labour-power the capitalist must also buy other commodities - buildings, tools, materials, etc.- for the labourer to work on, and to be transformed into the material depositories of the new value created. These commodities do not change in value, they merely pass on their value to the product, which will embody more labour and will be of greater value than the sum of the material elements of its production. At this stage we see that so long as labour-power is one of the commodities in the circuit M-C-M, then the possibility of the incrementation of value presents itself both inside and outside of circulation, at the same time.

Hence, we must include this development in our formula for capital. First, production we now see falls within the sphere of circulation. From this we derive the following:

$$M-C \dots P \dots C'-M',$$

where P represents the production process, and C' represents the new commodities of greater value. Second, since the consumption of labour-power must be included in such a process (i.e., a process which yields C') then labour-power must be a partial component of C. Hence:

$$M-C(c+v) \dots P \dots C'-M',$$

where c represents the constant part of capital, or material means of production, and v represents the variable part of capital, or the value of the commodity human labour-power. We look now to production as the theatre of value-expansion.

Since our investigation started from the circuit of capital, we are dealing here with specifically capitalist production. The owner of money

buys means of production and labour-power. The seller of labour-power is set to work on the means of production to transform part of these, raw materials, into new commodities. In this process the value of the original commodities (raw materials) are preserved and passed on to the product. The value of the tools, machines, etc., and other conditions of production (e.g., buildings, fuel) which are consumed in wear and tear is also passed on. But the product now embodies more labour than the sum of its material constituents, and so when it is sold it will realize a greater value. But the new product by no means automatically contains surplus-value, for we have left out of consideration the value expended by the capitalist in the purchase of labour-power. If any amount of newly embodied labour makes  $C'$  greater than  $c$  (value of constant capital) it is not true that any amount of newly embodied labour is necessarily sufficient to make  $C'$  greater than  $C$  ( $c+v$ ), or in other words sufficient for the establishment of the cycle  $M-M'$ . In order to yield surplus-value in the production process the exercise of labour-power must not only produce a use-value, but it must embody sufficient labour in the product to off-set the value of the capitalist's variable capital, plus an excess (which is surplus-value). Thus, the labour of the worker preserves the value of constant capital, creates a value equal to that of the variable capital which comes back to him in wages, and is the source of surplus-value. Thus, while  $C = c+v$ ,  $C' = c+v+s$ , where  $s$  represents surplus-value.

Wages are not the value of labour. Value is crystalized labour. To ask after the value of labour is as fruitless as the search for the heaviness of weight (as John Eaton points out (11)). Wages (or more precisely variable capital) represent the value of labour-power. The confusion of these two values, one real one imaginary, is the major form of ideology in capitalist society.

The aim of the capitalist is the expansion of his money; he is capital personified. To expand his money, or realise it as capital, more new labour must be embodied during the labour process than  $v$ , the value of labour-power. Therefore, the capitalist must set the labourer to work for a longer time than is necessary for the embodiment of labour equal to  $v$ . That is, the labourer must create more value in a day than that of one day's labour-power.

The final question we have about labour-power is how its value is determined. At this high level of abstraction the answer is simple. The value of labour-power is determined in the same way as the value of any

other commodity, by the labour-time socially necessary for its production. This magnitude is dependent upon the value of the commodities necessary to reproduce the labourer and his, or her, dependents at a "normal" standard of living. Only in this way can labour-power be reconstituted at the end of the day. The value of the means of subsistence of the worker (food, clothing, entertainment, etc.) in turn are determined by the quantity of labour embodied in them.

In the first place, then, if money is to act as capital, it must be thrown into circulation to purchase means of production and labour-power. Thus, money capital is converted into commodity capital. Secondly, commodity capital must be converted into a new product embodying surplus-value. The realization of this value in sale yields a greater value than was first advanced, and when converted into money terms this is profit. The crucial moment in the circuit of capital is the production of surplus-value. The capitalist being capital personified subjectively lives out the objective circuit of capital, and, qua capitalist, sees no other motion in the world than  $M-M'$ . The worker personifies labour and as such enters the circuit only in the production phase. This fateful meeting of the capitalist and the worker, personifying the two great classes of capital and labour, is the crux of capitalism. At their intersection arises surplus-value which makes profit, and thus accumulation, possible and distinguishes capitalist production from other modes of production and from commodity production per se.

### 2.3 THE RATE OF SURPLUS-VALUE AND THE RATE OF ACCUMULATION

From the general formula of capital  $M-C-M'$ , we see that in the renewed circuit the resultant money,  $M'$ , can serve no other function than that originally advanced. The second circuit thus becomes  $M'-C-M''$ , and so on. Hence,  $M < M' < M''$ . Thus capital expands by its very nature. In this section we look at the determinants of the rate at which capital expands at the total social level.

For the total social capital to be simply reproduced requires that a part of  $M'$  equivalent in value to  $c + v$  be laid out to replace the means of production and labour-power used up in the cycle of production. This would require that the whole of the surplus-value yielded (if any) be set to consumption, in the purchase of whatever goods were not consumed in the production process and the reproduction of labour-power. Capitalist reproduction, however, is reproduction on an extended scale and so some of the surplus-value must also be converted into capital.

Reproduction implies the extended repetition of the circuit of capital. As M' takes its place at the beginning of the new cycle, part of it continues its metamorphoses as capital, but part of it, i.e., the newly appropriated surplus-value, is converted into capital for the first time. Thus, the capitalist must not only refurbish his means of production and labour-power, but he must lay out funds in additional constant and variable capital. At the end of the first cycle, a greater value than that originally advanced was realized in its last act of exchange. But that sale was in reality partly the first act of the second cycle, the purchase of means of production, and partly the purchase of consumer goods by the working class, a prelude to the sale of labour-power. The second cycle therefore begins on an expanded basis, and across society capital is reproduced. This process asserts itself as the accumulation of capital.

The accumulation of capital is dependent on the production of surplus-value. There is a distinction to be made between absolute and relative surplus-value. Absolute surplus-value depends upon the length of the working day. As the working day is lengthened or shortened, the surplus-value produced grows or shrinks. The length of the working day has definite physiological limits, however, for workers need rest and nourishment. Moreover, it has moral or historically determined limits, as do the working week, the working year and the working life-time. Hence, if the capitalist-class wishes to increase the rate at which it accumulates capital, it cannot rely on absolute surplus-value beyond a certain point to achieve this.

The idea of relative surplus-value presupposes that the working day is divided into necessary and surplus labour-time. Relative surplus-value depends on the ratio between that portion of the working period (say a day) which goes to the reconstitution of the variable part of capital (necessary labour-time), and that which produces surplus-value (surplus labour-time). Its expansion or contraction is not an absolute change in the amount of value produced, but the increase or diminution of surplus-value relative to variable capital. Thus, any variation in relative surplus-value depends on the increase or the decrease of variable capital (necessary labour-time) as a proportion of the total value created.

The rate at which capital can accumulate depends on the rate at which surplus-value is extracted. The rate of surplus-value is represented as  $s/v$ . Marx identifies three variables which affect this rate.(12) They

are 1) the length of the working day, 2) the intensity of labour, and, 3) the productivity of labour. The first two have definite physiological and moral/historical limits, and have, moreover, been more or less established through long struggles between the capitalist and working classes. This is not to say they are no longer relevant in times of crisis, but the third variable, the productivity of labour, has no such limits and is the normal means through which a change in the rate of surplus-value is effected. "In order to prolong the surplus-labour, the necessary labour is shortened by means whereby the equivalent for the wages is produced in less time. The production of absolute surplus-value turns exclusively upon the length of the working-day; the production of relative surplus-value, revolutionises out and out the technical processes of labour, and the composition of society. It therefore presupposes a specific mode, the capitalist mode of production, a mode which, along with its methods, means and conditions arises and develops itself spontaneously on the foundation afforded by the formal subjection of labour to capital."(13)

An increase in the productivity of labour means that in a working day of given length, the same labour exercised with the same intensity, will produce more product. A two-fold increase in the productivity of labour would thus increase the worker's tally from 100 to 200 pieces per day. However, in accordance with the labour theory of value, the value of the two day's work would be equivalent since we assumed the labour-time to be constant. Thus, the same value is created, but distributed in one case over 100, and in the other over 200, articles. The value created per article is thus halved when the productivity of labour is increased two-fold.

In the case of a general rise in the level of productivity, the commodities which form the means of subsistence of the working class also diminish in value. Thus, if the normal standard of living before required the worker to consume means of subsistence of value 50, he now needs only 45 or 40 to reproduce his labour-power. Hence, because the value of labour-power is determined by the labour (i.e., embodied in consumer goods) socially necessary for its reconstitution, the value of labour-power has fallen.

Still assuming a working day of constant length, and a constant intensity of labour, a reduction in the value of labour-power will mean a contraction in the necessary labour-time as against the surplus labour-



time. Thus, the relative surplus-value increases, and along with it, the rate of surplus-value. Contingent upon the conversion of this surplus-value into capital, the rate of accumulation can now also increase.(14)

Finally, how is an increase in the productivity of labour achieved? The process itself is described in the last-given quotation - the revolutionization of the technical processes and labour. The advancement of technology is essentially a means to the greater economy, through efficiency, of labour.

#### 2.4 THE RATE OF PROFIT AND ITS EQUALIZATION

The capitalist does not recognise the circuit we have described. He sees only the expansion of his money, or  $M-M'$ . By ignoring the details of the production process which is interposed between the advance of money and the return of an expanded value, the specific nature of capitalist production, the production of surplus-value, is at once concealed. The cost-price ( $k$ ) of a commodity to the capitalist equals  $c+v$ , hence the final value of the commodity equals  $k+s$ . Ultimately,  $k$  reduces to the money advanced by the capitalist. The surplus-value embodied in the commodity is realized in its sale as the profit of the capitalist. Hence, the price of the commodity will be  $k+p$ , where  $p$  represents the profit. If the commodity sells at value then  $p=s$ .(15) Now in the equation  $M'=k+s$ , the surplus-value has no relation to the variable part of capital independent of the contribution of the latter to the cost-price. This leads to the appearance that it is the whole of the capital advanced which is uniformly expanded, and the precise mechanism of this expansion is shrouded in mystery. But wait! Since on the surface only the profit, or the surplus-value transformed into price terms, is visible (hence the formula  $M'=k+p$ ), and this profit first appears in the sale of the commodity, the expansion of value must occur in that exchange. This of course contravenes the law of value, but it should be added here that it is a reasonable enough conclusion given appearances, and the interest of the capitalist in not breaking them down.

In the previous section I pointed out that a rise in the productivity of labour resulted in an increase in the rate of surplus-value. We see now that these objective laws of motion of capitalist production differ from the subjective compulsion of the capitalist, for the internal relationship of  $s$  and  $v$ , which is the rate of surplus-value ( $s/v$ ), is obscured from him. Surplus-value presents itself to him, or is measured

by him, in a different way altogether. It is retroduced from the rate of profit, which is the relationship of surplus-value to total capital advanced, or  $s/c+v$ . Since he cannot fathom the workings of the production process, he cannot isolate surplus-value at its birth-place. The first inklings of expanded value are seen in the rate of profit as this reflects the value newly created in production. It is these signals to which the capitalist responds consciously.

In this section I discuss the determinants of rates of profit accruing to different individual capitals and branches of industry, how these profit rates activate the movement of capital between branches, and how these effects are transformed into causes in the further determination of the ever-fluctuating rate of profit. In all this I assume that the rate of surplus-value for each capital is the same. The rate of surplus-value is held constant because we are now dealing with the interaction between capitals and not with the relationship of capital and labour. The rate at which capital extracts surplus-value from the working class has already been discussed. We now look at the ways in which this surplus-value, once extracted, is distributed among the various capitals.

To begin with let us look at the differences in productivity between capitals in one branch of industry, i.e., capitals producing one type of commodity, like cars or coal. The productiveness of each labour-army will depend on the level of technology employed in each capital. The revolutionising of the technical processes of labour which accompanies the accumulation of capital, according to Marx(16), effects a change in the organic composition of capital.

Marx defines the organic composition of capital thus: "I call the value composition of capital, insofar as it is determined by its technical composition and mirrors the changes of the latter, the organic composition of capital."(17) By capital Marx means the commodities bought by the owner of money to function as capital in the production process. They are means of production and labour-power. The composition of capital refers to the relative proportions of these two elements in the commodity capital. As we have seen labour-power is the variable component of capital. The extent of its employment depends on the quantity required to set the material means of production in motion. This is the technical composition of capital - so much labour-power is needed to work the means of production at a given stage of accumulation. The value composition of capital refers to the relative quantities of value invested in its

constant and variable components. All things remaining equal, the technical composition determines the value composition, and hence the latter will equal the organic composition. If the technical composition changes there may be a change in the value composition, for instance, if new automatic machinery replaces hand-operated plant. In this case the labour-power required will diminish and the variable portion of capital will fall as against the constant part, and thus the organic composition will rise.(18)

The organic composition of capital is in this way directly related to the "technical processes of labour". With more advanced technology the same commodity product can be produced with relatively less labour. Hence, the technical composition of capital changes in favour of means of production, and, all things remaining equal, this will mean an increase in the constant as opposed to the variable portion of capital and therefore a rise in the organic composition. But, why should a rising organic composition of capital accompany accumulation? The answer to this is to be found in the competitive nature of capitalist production.(19)

Competition is the stick that drives the technological revolutions of the capitalist mode of production, which raise the organic composition of capital. As labour productivity rises less labour-time is required for the production of the same commodity. Although the worker may work the same working day, etc., by using more advanced machines, processes and techniques, he produces more commodities. Since one day's labour is still embodied in the total day's production, each commodity must of necessity be the product of a smaller portion of that day's labour. Yet because the exchange-value of the single commodity is determined by the socially necessary labour-time, that is, the average normal amount of labour necessary for its production, the cost-price of the single commodity will decrease relative to its socially recognized value. Hence, vis-a-vis other capitals (especially the less efficient, producing commodities with more than the socially necessary labour-time), our capitalist will achieve a better rate of profit.

The penalty for failing to keep abreast of competition and the rising organic composition of capital is cumulative. If a capital achieves a below average rate of profit it will not be able to reinvest at the average rate, and thus the organic composition of the branch of industry as a whole will increase at a faster rate than this particular capital's. Hence, its rate of profit will be relatively lower again in the next

year, and so on. Thus, the leading capitals grow at an ever-increasing rate while the below-average, or smaller, capitals are either driven out of this branch of industry (i.e., into branches with a lower organic composition of capital), or are annexed and thenceforth controlled by the larger, more powerful, capitals.(20) These processes tend to result in a uniform organic composition of capital within each branch of industry, corresponding to the level of development of productive forces available for the production of its particular commodity.

When he comes to consider differences in productivity between branches of industry in Part II of Volume III of Capital, Marx indeed takes the position that the compositions of given branches will be roughly uniform, and that deviations from this situation are incidental to the analysis in general.(21) On the assumption that commodities exchange at value, capitals in different spheres with different compositions will have different rates of profit. Take two capitals with the same rate of surplus-value - 100%:

$$A. 80c + 20v + 20s = 120$$

$$B. 20c + 80v + 80s = 180$$

The reader will recall that the rate of profit is the ratio of surplus-value to total capital advanced, or  $s/c+v$ .(22) It follows that the rate of profit of Capital A is  $20/80+20 = 20\%$ . That of capital B is  $80/20+80 = 80\%$ . The capital in the sphere of lower organic composition thus achieves a higher rate of profit in respect of the fact that its labour-army creates a greater magnitude of surplus-value for every 100 of capital invested.

Having reached this conclusion, however, Marx remonstrates that "There is no doubt, on the other hand, that aside from unessential, incidental and mutually compensating distinctions, differences in the average rate of profit in the various branches of industry do not exist in reality, and could not exist without abolishing the entire system of capitalist production. It would seem, therefore, that here the theory of value is incompatible with the real phenomena of production, and that for this reason any attempt to understand these phenomena should be given up."(23) Here Marx finds the real world provides an anomaly to the consistent development of the labour theory of value. The remainder of the section deals with Marx's treatment of the anomaly of the equalization of the rate of profit.

Analytically, we require a consistently developed "proof" which accomodates both the law of value - which states that commodities exchange at a rate determined by the labour-time socially necessary for their production - and the fact that rates of profit tend to be even between spheres of production. Marx tackles the second requisite first.

To explain the near equality of rates of profit requires that we postulate a general rate of profit, such that, this general rate of profit falls to all branches of industry, and, assuming uniform compositions, to each capital within the branch, regardless of the differing compositions of the different branches.

This is an obvious condition, but how are we to square it off with the law of value when different quantities of surplus-value are created on top of equal cost-prices. That is to say, when rates of profit in different sectors ought theoretically to differ! Marx's answer to this question is complex. First, he recognises that the produced surplus-value must be redistributed among the different sectors such that, the more efficient spheres of higher composition are precisely rewarded for their economy of labour with surplus-value produced in another sphere. Spheres of average composition realise their produced surplus-value. Thus, all in all, each capital realises the average rate of profit, and this is, then, the general rate of profit.

To demonstrate, imagine two capitals in different branches of industry with the following compositions:

$$A. 80c + 20v + 20s = 120$$

$$B. 20c + 80v + 80s = 180$$

The rate of surplus-value is 100% in both cases. The rate of profit of Capital A is  $20/80+20 = 20\%$ . That of capital B is  $80/20+80 = 80\%$ . The cost-price of the commodity product to both capitals is the same, but the value of the finished commodities is quite different due to the different organic compositions of the capitals. In reality we know that both will receive a near equal rate of profit. The only apparent way to explain that event without altering their cost-prices, is the transfer of produced surplus-value from B to A. To equalise the rates of profit 30s must be transferred. This transfer would yield the following:

$$A. 80c + 20v + 50s = 150$$

Rate of Profit = 50%

$$B. 20c + 80v + 50s = 150$$

Rate of Profit = 50%

We also find that the capital of average composition yields its own produced surplus-value, hence the average rate of profit is the general rate of profit:

$$\begin{aligned} \text{C. } 50c + 50v + 50s &= 150 \\ \text{Rate of Profit} &= 50\% \end{aligned}$$

Now the redistribution of surplus-value in the way described is in fact incompatible with the law of value, as set out here in Section 1.(24) It would thus seem a somewhat ad hoc development in the theory, because, quite simply, under the new hypothesis commodities would not exchange at value. That is, they would not exchange at cost-price plus surplus-value, they would exchange in whatever ratio necessary to satisfy the new hypothesis, i.e., at that price which would make the rates of profit equal. Marx develops this further -

Over the whole of society, a certain amount of capital is invested, and a certain amount of surplus-value is created. The part of the surplus-value which returns to each capital as profit takes no account of the compositions of individual capitals (i.e., of the amounts of surplus labour-time involved in their production!), but only of the total amount of capital each threw into circulation. Hence, the return to each capital is proportional to its mass, which means, conversely, that the return of profit to each unit of capital invested is equal. In other words, the rate of profit is equalized at the average, and it is this percentage on total capital advanced which each capital realizes as profit.

And further -

From the point of view of the capitalist, the cost-price of the commodity(25) is equal to  $c+v$ . However, the 'cost' of the commodity from the point of view of social production is different. The transformation of its "value" into money terms, or price, must include not only the cost-price to the capitalist, but also the surplus-value which appears in the finished products. At the same time we must take account of the redistribution of this surplus-value in the way described above. Hence, the price of the commodity is  $c+v$  transformed into money terms, which is the cost-price, plus the profit of the capitalist. In all  $k+p$ . But since the share of the total surplus-value of a capital, or  $p$ , is equal to the average rate of profit on capital advanced, then  $p$  must be equal to  $k \times p'$ , where  $p'$  represents the average rate of profit. What Marx calls the

price of production of the commodity, can thus be calculated as  $k + (k \times p')$ .

So, Marx's final word on the subject is that commodities do not exchange at value, but at prices of production. Is this ad hocery? If we were to ask under what conditions one could legitimately change one's theory of the determination of exchange ratios, the only affirmative answer would surely be - if the determination of exchange ratios changed in reality. This is the claim which Marx makes.

In Section 1 we saw that once we assumed a certain level of development of commodity production the labour theory of value was no longer sufficient in itself to determine exchange ratios. This is why Marx develops the law of value. In this section we have seen that the law of value, which remember was discovered under "simple commodity production", is no longer entirely sufficient to determine exchange ratios under capitalism. The new force (i.e., in history, and to be analysed) which requires auxiliary hypotheses to the account of commodity production in general is capital itself. The differentia specifica of capitalism is accumulation and thus profit. It is the drive to accumulate that conditions the equalization of the rate of profit at the average, or general rate, and this in turn leads to the exchange of commodities at prices of production. Marx writes:

"Under capitalist production it is not merely a matter of obtaining an equal mass of value in another form - be it that of money or some other commodity - for a mass of values thrown into circulation in the form of a commodity, but it is rather a matter of realising as much surplus-value, or profit, on capital advanced for production, as any other capital of the same magnitude, or pro rata to its magnitude in whichever line it is applied. It is, therefore, a matter, at least as minimum, of selling the commodities at prices which yield the average profit, i.e., at prices of production. In this form capital becomes conscious of itself as a social power in which every capitalist participates proportionally to his share in the total social capital....

"Now, if the commodities are sold at their values, then, as we have shown, very different rates of profit arise in the various spheres of production, depending on the different organic compositions of the masses of capital invested in them. But capital withdraws from the sphere with a low rate of profit and invades others, which yield a higher profit. Through this incessant outflow and influx, or, briefly, through its distribution among the various spheres, which depends on how the rate of profit falls here and rises there, it creates such a ratio of supply and demand that the average profit in the various spheres of production becomes the same, and values are, therefore, converted into prices of production. Capital succeeds in this equalization, to a greater or lesser degree, depending on the extent of capitalist development in the given nation."(26)

Moreover, notice that when the law of value was annexed to the labour theory of value, the latter was not made redundant, for we were still dealing with commodity production, where, at a certain level of development, the determination of value by labour expresses itself through the law of value. In the same way, the law of value does not cease to be applicable under capitalist commodity production; capital modifies its working precisely because it is profit-seeking. In the following table the deviation of prices around value is shown for different spheres of production with different compositions on the basis of the equalization of the rate of profit and formation of prices of production.(27)

Capitals	Surplus-Value	Cost-Price	Rate of Profit	Deviation of Price from Value
c+v	s	Value c+v+s	k pp	p'
I 80c + 20v	20	90	70	92 22% +2
II 70c + 30v	30	111	81	103 22% -8
III 60c + 40v	40	131	91	113 22% -18
IV 85c + 15v	15	70	55	77 22% +7
V 95c + 5v	5	20	15	37 22% +17

Marx writes: "Taken together, the commodities are sold at  $2 + 7 + 17 = 26$  above, and  $8 + 18 = 26$  below their value, so that the deviations of price from value balance out one another through the uniform distribution of surplus-value, or through the addition of the average profit of 22 per 100 units of advanced capital to the respective cost-prices of the commodities I to V."(28) In the first place then, the commodities exchange on average at value. The law of value has thus developed with the development of capitalist production, and not been abolished. Secondly, the law of value will still govern price movements - if the socially necessary labour-time for the production of a commodity decreases, so will its price fall; and if it increases, so will its price rise, only, not in the same proportion.(29) These changes will now be mediated through the equalization process. Thus, the law of value underlies the formation of prices of production. Marx comments on this development, and again points out that it arises from the movement of capital into the most profitable sphere, i.e., from what is peculiar to capitalism - the lust for profits:

"The exchange of commodities at their values, or approximately at their values, thus requires a much lower stage than their exchange at their prices of production, which requires a definite level of capitalist development....



"Apart from the domination of prices and price movement by the law of value, it is quite appropriate to regard the values of commodities as not only theoretically but also historically prior to the prices of production."(30)

Let us look now at how the formation of the general rate of profit, and prices of production would be calculated between two branches of industry of differing compositions and differing masses. Consider the coal-mining and automobile industries for which internal general rates of profit have been established. Let these be respectively 70% for coal-mining, and 30% for automotive concerns. In this case, coal-mining must produce greater surplus-value to total capital, and this might be represented as follows:

$$\begin{array}{lcl} \text{Coal} & 60c + 140v + 140s = 340 & : \quad p' = 70\% \\ \text{Autos} & 70c + 30v + 30s = 130 & : \quad p' = 30\% \end{array}$$

Between these very different branches of industry there is no formal difficulty in setting the average rate of profit by dividing the total capital involvement into the total surplus-value and expressing this as a percentage:  $170/300 = 56.66\%$ . With our formula for prices of production, we calculate that the price of production for the coal-mining industry is  $200 + 200 \times 56.66\% = 313.33$ , and that for the automobile industry  $100 + 100 \times 56.66\% = 156.66$ . The results are 1) that the total prices of production = 470 = total embodied value, 2) that the coal-mining industry has realized less surplus-value (113.33) than it created (140), and, 3) that the automobile industry has realized a profit (including a surplus-profit of 26.66) of 56.66 as against its produced surplus-value of 30. Thus, despite the fact that the coal-mining industry gains a much greater return than the automobile industry in view of its greater contribution to the total social capital, it has in fact released some of its surplus-value into the automotive branch of industry.

As for the relative prices of coal and cars, the following applies. Suppose that 1% of the advanced capital in coal-mining produces one hundred tons of coal. Suppose also that 1% of the capital of the automobile industry produces one car. Then the price of production of one hundred tons of coal will be 3.133, and this will be expressed in money which of course will depend on the relative value of our universal equivalent or gold, and the number of monetary units (e.g., dollars) which has contingently come to represent each ounce of the precious metal. The current value of money is not important, so let us assume at

random that in dollar terms the price of production of one hundred tons of coal = \$31,333.3. The price of production of one car will be 1,566 = \$15,666.6. The important thing is that even independent of the currency in which it is expressed a hundred tons of coal is equal in value to two cars. Now we could if we wished add to our value equations similar equations for all commodities in all branches of industry. In this case, the calculation of the average rate of profit would probably be different, but the result and its consequences would be formally identical. Finally, we could add the equation for gold production which (taking account of the quantity of paper money in circulation), would show the definite money price assigned to a commodity of a given price of production, just as we have expressed the equivalent value of coal in cars.

We might sum up in Marx's own words:

The General rate of profit is, therefore, determined by two factors: 1) The organic composition of capitals in the different spheres of production, and thus, the different rates of profit in the different spheres. 2) The distribution of the total social capital in these different spheres, and thus, the relative magnitude of the capital invested in each particular sphere at the particular rate of profit prevailing in it; i.e., the relative share of the total social capital absorbed by each individual sphere of production.(31)

So far we have dealt with the formal calculation of the rate of profit and its equalization. But what are the real concrete processes which necessitate this procedure, i.e., bring about the equalization in reality? We have already seen that the root of the equalization of the rate of profit inheres in the expansive nature of capital. There are two sides to this. There is first the natural purpose of capital to accumulate at the highest pressure possible - this is the carrot which draws it on. And there is, secondly, the competition which arises with the accumulation of capital, which becomes the stick that drives it.

Within a given sphere, a capital must consistently achieve an average rate of profit to remain viable in that sphere. If it does not, it will lose out in the battle of competition which is fought through the cheapening of commodities by means of raising the organic composition of capital. If a capital's reinvestment rate does not allow it to keep abreast of the level of development of productive forces in that sphere in general, it will be forced into another more backward branch of industry. The more advanced capitals, on the other hand, feel no inhibitions about not merely achieving an average rate of profit, but striving for the maximum possible profit. Because of this they may leap

ahead in the productivity of labour driving out all those capitals who do not soon follow them, and intensifying competition.

Between branches of industry profit is also the motive, but here a new lever to the accumulation of one capital as opposed to others is introduced. That is, the mobility of capital between branches.(32) If we imagine for a starting point that different branches of industry have different organic compositions and therefore different rates of profit, the drive to accumulate and the competition it evokes will simultaneously attract and compel capital to move from spheres of lower profit to spheres of higher profit. In this way branches achieving above average rates of profit will attract investment of additional capital. This will increase production (supply) above effective demand, prices will fall under pressure of competition, and the rate of profit for the branch will decline. Branches of industry with below-average rates of profit will experience a net outflow of capital into more favourable spheres of investment.

The approximation of the level of production to the level of demand in this way will always be over-compensatory since it is unregulated except by the lust of all capitals for profit. Thus, where rates of profit fall marginally below the average capital evacuates the branch of industry allowing it to rise again, and lowering the rate of profit of the favourable sphere which it now invades. This new situation will have the same effect, and condition the reverse movement. While the general rate of profit is never constant over all firms or spheres, the rate of profit tends to equalize in this way converting values into prices of production.

The process of 'equalization' presupposes inequality. Looked at from the point of view of the system, equalization of the rate of profit would at first seem to embody only one motive force - that toward equality, which corresponds with the subjective profit motive. In the light of recurrent momentary unevenness, we must conclude that the impetus for equalization also reconstitutes the original inequality. This is indeed the case. In the unco-ordinated and competitive search for better profits, capital moves from one sphere to another in the correct proportions only by accident. It is far more likely that, in a given period, too little capital will be transferred, in which case the transfer will continue, or too much capital will be transferred, and then equalization must start anew in another direction. The process of

equalization of the rate of profit does not conclude with equilibrium, but carries on beyond this point to over-compensation. It must therefore be regarded as a tendency and never a permanent reality.

## 2.5 THE LAW OF THE TENDENCY OF THE RATE OF PROFIT TO FALL

In Part 3 of Volume III of Capital, Marx tackles another problem presented by the real course of capitalist development. The reader will recall from Section 3 of the present chapter that we concluded that an increase in the productivity of labour across society would result in an increase in the rate of surplus-value generally. That is, it would decrease the labour-time necessary for the worker to produce his material life, and so increase the surplus labour-time as a proportion of the working day. In Section 4 we looked at the situation between capitals, where the drive to accumulate, and the competition it evokes, tend to equalize the rate of profit in the redistribution of surplus-value, and this subsequently spurs competition on. The general upshot is that each capital strives to economize labour by increasing productivity. Thus, the general rate of surplus-value should increase. However, be this as it may, there is still under capitalism a tendency for the rate of profit to fall, and this was never so apparent as in the early competitive phase of the capitalist mode of production in which Marx lived. Marx was not the first person to attempt an analysis of the equalization of the rate of profit, or of the tendency of the rate of profit to fall. "The economists perceived the phenomenon and cudgelled their brains in torturous attempts to interpret it." (33) Thus, Marx had the problem of explaining the empirical trend in a consistent way; his was not the claim that the real tendency followed from the presentation of the law.

We represent the rate of profit thus:  $s/c+v$ . What conditions would be required for it to fall? Clearly,  $s$  must diminish relative to  $c+v$ . However, we have seen that the rapid development of productive forces under capitalism would tend to increase the rate of surplus-value and so the rate of profit would tend to rise. To explain the falling rate of profit, then, we must postulate an internally related pressure in the opposite direction. That is, not a counter-tendency which could reverse the trend of rising rates of profit, but an 'organically' related pressure, such that, in the very act of raising productivity the apparent "tendency of the rate of profit to rise" is pre-empted. This internal relation must also be consistent with the theory so far. Does such a

pressure exist? Marx's answer is yes. Simultaneously with the raising of labour productivity, and the pressure for the extension of surplus labour-time, the organic composition of capital rises. This increases the constant (c) as opposed to the variable capital (v). Thus, v shrinks, and certeris parabus, so does s. At the same time c is growing. Hence, to explain the falling rate of profit the increase in labour productivity must involve a greater increase in the organic composition of capital than the etiologically equivalent increase in the rate of surplus-value. Because both these pressures are entirely internal to capital, Marx generalizes this explanation into the law of the tendency of the rate of profit to fall. "This does not mean to say that the rate of profit may not fall temporarily for other reasons. But proceeding from the nature of capitalist production, it is thereby proved a logical necessity that in its development the general average rate of surplus-value [i.e., not extraordinary rates causing temporary falls in the rate of profit] must express itself in a falling general rate of profit."(34)

Now, the transition from the explanation of the trend of the falling rate of profit to the law of the tendency of the rate of profit to fall requires only this: that we assume, as is the case in any branch of science, that the long-run trend of the rate of profit to fall during Marx's life-time was not accidental, or due to extraneous causes. Even given this assumption, however, Marx did not have to analytically derive the particular law that he did. He might have found another explanation of the falling rate of profit. The important thing is that since he did arrive at this law, it was thenceforth incumbent upon all who followed him in this step to consistently explain anomalies to the law where they arose and thus "save" its validity. The question of how long the law of the tendency of the rate of profit to fall could be regarded as a real law of motion of the capitalist system turns exclusively on this endeavour, and I discuss this topic in the next chapter.

There has, however, been debate on this topic in the history of marxism. The debate arises from the following conception of the problem:- We represent the rate of profit thus:  $s/c+v$ . For the rate of profit to fall s must diminish relative to  $c+v$ . On the one hand, however, the rapid development of productive forces under capitalism would tend to increase the rate of surplus-value and thus, holding the organic composition of capital (c/v) constant, the rate of profit will rise. On the other hand, the means through which this increase in productivity is achieved is

accompanied by a rising organic composition of capital and thus, holding the rate of surplus-value ( $s/v$ ) constant, the rate of profit will fall. Hence, the whole issue turns upon the relative movements of the organic composition of capital and the rate of surplus-value, insofar as these are internally related.(35)

From this point of view P.M. Sweezy writes: "If both the organic composition of capital and the rate of surplus-value are assumed variable, as we think they should be, then the direction in which the rate of profit will change becomes indeterminate. All we can say is that the rate of profit will fall if the percentage increase in the rate of surplus-value is less than the percentage decrease in the proportion of variable to total capital."(36) Sweezy is of course correct in what he says, but he wants the theory to do too much work and history to do none. The whole point is that the rate of profit was falling when Marx presented the law, and subsequent scholars who wish to be Marxists must account for the failures and distortions of the law to the point they feel it can be defended. If it can no longer be defended Marx was wrong, and we need another explanation of the falling rate of profit in the early competitive phase of capitalism, and another whole complex of theory to account for subsequent trends.

Fine and Harris write: "...if  $c/v$  rises and  $s/v$  does not rise sufficiently, the rate of profit will fall. For Marx, however, it appears in places that there was no "if": the law of TRPF appears as an inevitable aspect of accumulation."(37) Here again the problem seems to be conceived as one of logically prescribing history given the indeterminacy Sweezy pointed out, rather than as one of explaining a falling rate of profit on the basis of a rising rate of surplus-value. In the latter case Marx points out that there is only one important variable underdetermined - the organic composition of capital. The unsubstantiated assumption that Fine and Harris point to, i.e., the rate of surplus-value is held constant, is merely a means of simplifying and analysis given the fact that to explain the falling rate of profit on the basis of a rising rate of surplus-value within the Marxian system, requires precisely that the rise in the organic composition of capital outstrips the rise in the rate of surplus-value. The attribution of the falling rate of profit to a law of tendency thence follows from the internal relation of the three variables.

With J.M. Gillman we have come full circle. He forgets that both trends in the rate of profit and the rate of surplus-value were historically determinate for Marx and formed the basis of the derivation of the law of the tendency of the rate of profit to fall. According to Gillman, we have yet to look at history for the first time: "Marx did not have the facts to test his law of the falling tendency of the rate of profit. They first had to emerge from generations of capitalist production. But now we have a considerable accumulation of such facts, and it seems high time that, with Francis Bacon, we counted the horse's teeth instead of continuing to speculate on the number." (38) Marx, in fact, counted the horses teeth and explained why it had that number. The only source of concern to J.M. Gillman could be if the number of teeth of the horse changes. That would require further explanation. But if we assume from the start that both the number of teeth the horse is said to have, and the explanation of why it should have that imaginary number, are purely speculative endeavours, then it is obvious that everything is indeterminate. However, Gillman's basis for inferring that the postulation of the tendency of the rate of profit to fall was speculative is that Marx could not collect data from the future, yet, one assumes this holds good for all of us. On the other hand, his argument that present day (1958) America is a better historical society for the interpretation of data is also suspect. Kuzo Uno has argued, on Marxist (rather than Baconian) grounds, that the formation of a consciousness which accurately reflected the essential nature of capitalist production was far more likely in places which developed through the stages of feudalism, primitive accumulation and then capitalism, and at the time when capitalism was here forced to "purify" itself of elements of these pre-capitalist modes of production. (39)

The three views presented here address the problem that on an purely abstract basis there are no grounds to predict the relation of the rate of surplus-value and the organic composition of capital. Trends in the rate of profit are therefore indeterminate. They ignore the fact that Marx begins from the basis of capitalist production, where trends in the rate of profit, the rate of surplus-value and the organic composition of capital were all determined, and where from their inter-related movements the extent of their relative changes could be deduced.

## NOTES TO CHAPTER II

1. Mandel, E. 'Introduction' In Marx, K. (1978) Capital Vol.II. Harmondsworth, Penguin. p.11.

2. Meek, R.L. (1975) Studies in the Labour Theory of Value 2d.ed NY, Monthly Review Press. pp.303-04.

3. Marx, K. (1978) Capital Vol.I. Moscow, Progress. p.43

4. "The criticism of economics, even according to the method secured [the materialist dialectic] could still be exercised in two ways: historically or logically. Since in history as in its literary reflection, development as a whole proceeds from the most simple to the most complex relations, the historical development of the literature of political economy provided a natural guiding thread with which criticism could link up and the economic categories as a whole would thereby appear in the same sequence as in the logical development. This form apparently has the advantage of clearness, since indeed it is the actual development that is followed, but as a matter of fact it would thereby at most become more popular. History often proceeds by jumps and zigzags and it would in this way have to be followed everywhere, whereby not only would much material of minor importance have to be incorporated but there would be much interruption of the chain of thought; furthermore, the history of economics could not be written without that of bourgeois society and this would make the task endless....The logical method of treatment was therefore the only appropriate one. But this, as a matter of fact, is nothing else than the historical method, only divested of its historical form and disturbing fortuities. The chain of thought must begin with the same thing that this history begins with and its further course will be nothing but the mirror-image of the historical course in abstract and theoretically consistent form, a corrected mirror-image but corrected to laws furnished by the real course of history itself, in that each factor can be considered at its ripest point of development, in its classic form." (c.f. Engels' 'Review' In A Contribution to the Critique of Political Economy. Moscow, Progress. 1970. This reproduction is slightly different and comes from Meek: Studies in the Labour Theory of Value. pp.148-49.)

5. Marx, K Capital. Vol.I. op.cit. p.43

6. Ibid. p.45.

7. Ibid. p.47.

8. Ibid. p.46-47.

9. The fact that the economies of the world, and the world economy, no longer operate a gold standard is not relevant to the topic of the development of money as such. The collapse of the gold standard had subordinant determinants which came into play only after capitalism had developed, which, of course, can not effect the question of the development of commodity production, or the development of money which was an aliquot part of this.

10. Marx (1978) Capital. Vol.I. op.cit. p.164.

11. Eaton, J. (1977) Political Economy N.Y., International Publishers. p.68.

12. Marx (1978) Capital. Vol.I. op.cit. chpt.XVII. p.486.

13. Marx, K. (1978) Capital Vol.I. op. cit. pp.477-78.



14. "Increase or diminution in surplus-value is always consequent on, and never the cause of, the corresponding diminution or increase in the value of labour-power" (Marx (1978) Capital. Vol.I. p.488.)

15. "For prices at which commodities exchange to approximately correspond to their values, nothing more is necessary than 1) for the exchange of the various commodities to cease being purely accidental or only occasional; 2) so far as direct exchange of commodities is concerned, for these commodities to be produced on both sides in approximately sufficient quantities to meet mutual requirements, something learnt from mutual experience in trading and therefore a natural outgrowth of trading; 3) so far as selling is concerned, for no natural or artificial monopoly to enable either of the contracting sides to sell commodities above their value or to compel them to undersell. By accidental monopoly we mean a monopoly which a buyer or seller acquires through an accidental state of supply and demand." (Marx (1978) Capital. Vol.I. p.178.) Even if particular commodities do not sell at value the seller can still make a profit so long as they sell above their cost-price.

16. See quotation in Note 14 above. "...the production of relative surplus-value revolutionizes out and out the technical processes of labour, and the composition of society" - Marx.

17. Marx, K (1978) Capital. Vol.I. op.cit. p.574.

18. On the other hand, it is quite possible in reality that the value composition of capital will change while the technical composition of capital remains constant, for example, where the competition of the working class for jobs in an area or time of high unemployment enables the capitalist to buy labour-power below value. In this case, the same number of working hours is required to work on the same means of production, hence the change in the value composition does not mirror a change in the technical composition and so the organic composition of capital remains unchanged.

19. Capitalist competition is a natural aspect of capitalism, where there is on the one hand a drive to accumulate, and on the other, uncoordinated production. The second condition allows disarticulation of one productive unit from another, which diminishes the probability of production closely matching social demand. The first condition means 1) that capitals will expand as fast as possible once disarticulated and this naturally opposes them one to another with regard to available market demand, and 2) capitals will crowd into the sphere which is, in the first place, most profitable. In this sphere overproduction will likely result. Competition follows from these conditions given that a commodity can be sold at a price below its value, yet above its cost-price. In this way, individual capitals attempt to mitigate social overproduction partially. "The fundamental law of capitalist competition, which political economy had not hitherto grasped, the law which regulates the general rate of profit and the so-called prices of production determined by it, rests, as we shall later see, on this difference between the value and the cost-price of commodities, and on the resulting possibility of selling a commodity at a profit under its value." (Marx (1977) Capital. Vol.III p.37)

20. "The battle of competition is fought by cheapening of commodities. The cheapness of commodities depends, ceteris paribus, on the productiveness of labour, and this again on the scale of production. Therefore, the larger capitals beat the smaller. It will further be remembered that, with the development of the capitalist mode of production, there is an increase in the minimum amount of individual capital necessary to carry on business under its normal conditions. The smaller capitals, therefore, crowd into spheres of production which Modern Industry has only sporadically or incompletely got hold of. Here competition rages in direct proportion to the number....It always ends in the ruin of many small capitalists, whose capitals partly pass into the hands of the conquerors, partly vanish." (Marx (1978) Capital. Vol.I. pp.586-7.)

21. "The premise in this entire analysis is naturally that by speaking of the composition or turnover of a capital in a certain line of

production we always mean the average normal proportions of capital invested in this sphere, and generally the average in the total capital employed in that sphere, and not the accidental differences of the individual capitals." (Marx (1977) Capital. Vol.III. p.144.)

22. I assume here that the surplus-value extracted can be directly translated into profit, i.e., that the mass of surplus-value = the mass of profit. It is not directly relevant at this stage, as P.M. Sweezy suggests, that we are abstracting from the division of the profit among capitals, e.g., from property rents, for we are currently dealing with the division of surplus-value to arrive at profits per se. Only after Part 3 of Volume III of Capital, does Marx deal with the division of profits. On the other hand, in identifying  $c+v$  as total capital advanced, I am identifying this total with the capital actually used up, and this is indeed a simplifying assumption. For further discussion see P.M. Sweezy: The Theory of Capitalist Development, Chapter IV, Section 6.

23. Marx, K (1977) Capital. Vol.III Moscow,Progress. p.153.

24. And as set out by Marx in Part 1 of Volume I of Capital.

25. By 'commodity' here is meant the total commodity product of a production period in which all of  $c$  is used up.

26. Marx (1977) op.cit pp.195-6.

27. Ibid p.157

28. Ibid p.157

29. This is holding other determinants like supply and demand constant. See Marx on this - Capital. Vol.III. p.177.

30. Marx, K (1977) op.cit p.177.

31. Ibid p.163.

23. "The incessant equalization of constant divergences is accomplished so much the more quickly 1) the more mobile the capital, i.e., the more easily it can be shifted from one sphere to another and from one place to another; 2) the more quickly labour-power can be transferred from one sphere to another and from one production locality to another. The first condition implies complete freedom of trade within a society and the removal of all monopolies with the exception of natural ones...[and]...the development of the credit system...The second condition implies the abolition of all laws preventing the labourers from transferring from one sphere of production to another; indifference of the labourer to the nature of his labour; the greatest possible reduction of labour in all spheres of production to simple labour; the elimination of all vocational prejudices among labours, and...a subjugation of the labourer to the capitalist mode of production." (Marx (1977) Capital. Vol.III. p.196.)

33. Marx, K (1977) op.cit. p.213.

34. ibid p.213.- square brackets added.

35. The relative movements of the rate of surplus-value and the organic composition of capital is only important here insofar as they are internally related because the question is not whether the tendency of the rate of profit to fall finds expression at any given time, i.e., whether the rate of profit actually does fall, but whether such a tendency exists. A number of incidental semi-autonomous circumstances could stop the tendency of the rate of profit to fall being expressed in an empirical trend of falling profit rates. This has no bearing on

whether the tendency actually exists. Only an internally related cause could give us good reason to suspect that the tendency as such does not exist.

36. Sweezy, P.M. (1970) The Theory of Capitalist Development NY, Modern Reader Paperbacks. p.102.

37. Fine, B & Harris, L (1979) Rereading Capital. London, MacMillan Press. p.61.

38. Gillman, J.M. (1958) The Falling Rate of Profit NY, Cameron Associates. p.31

39. See K. Uno: Principles of Political Economy. A summary of this argument can be found in the 'Translator's Introduction' to Same.

### Chapter III

#### UNEVEN DEVELOPMENT AND ITS CAUSES

Marx called the tendency of the rate of profit to fall a law, because he believed it followed of necessity from the nature of capitalist production. However, in reality the dwarfing of labour by capital does not mechanically correspond to the drastic crash of the rate of profit. Here is another anomaly to the theory which must be explained, and thereby transformed into corroborating evidence. In Section 1 of this chapter I review some counteracting influences which, according to Marx, "cross and annul" the full force of the tendency of the rate of profit to fall.

In the following sections a further anomaly is discussed. Assuming that the tendency for the rate of profit to fall is ultimately the dominating tendency vis-a-vis the counter-acting influences, one would expect that given a broad enough time scale the rate of profit would in fact fall to a very low level eventually. Yet, this is not the case in reality. How is it then that the rate of profit may at times decline, but at other times display long-run increases, as in the boom after the Second World War? This historical equivocality seems to disconfirm a secular tendency for the rate of profit to fall. How are we to make this consistent with the theory so far?

#### 3.1 THE TENDENCY OF THE RATE OF PROFIT TO FALL AND ITS COUNTERACTING INFLUENCES

If we consider the enormous development of the productive forces of social labour in the last 30 years alone as compared with all the preceding periods; if we consider, in particular, the enormous mass of fixed capital, aside from the actual machinery, which goes into social production as a whole, then the difficulty which has hitherto troubled the economist, namely to explain the falling rate of profit, gives place to its opposite, namely to explain why this fall is not greater and more rapid. There must be some counteracting influences at work, which cross and annul the effect of the general law, and which give it merely the characteristic of a tendency, for which reason we have referred to the fall of the general rate of profit as a tendency to fall.(1)

The tendency of the rate of profit to fall is totally internal to capital. It thus presents itself as a logical necessity. We saw that a rising rate of surplus-value which emanates naturally from the rising productivity of labour is insufficient to pre-empt this tendency. But the decline of the rate of profit is not as great as we would expect. So

there must be counter-acting influences which are, on the one hand, natural under capitalism, but on the other, not internal to capital. Marx identifies the following four counter-acting influences to the tendency: the increasing intensity of exploitation, the production of relative surplus population, the cheapening of elements of constant capital, and the extension of foreign trade. The first two depend on the progressive domination of capital over labour under capitalism; and the final two mechanisms depend on the opposition and domination of certain capitals over others.

1. Increasing intensity of exploitation. The intensity of exploitation is increased primarily by those means we saw were now secondary in capitalist production - increasing intensity of labour which yields greater relative surplus-value, and lengthening of the working day, which yields more absolute surplus-value. The lengthening of the working day in advanced countries now commonly takes the form of over-time. The extension of the working period also includes Saturday work, which extends the working week. The introduction of 'second-earners' and children into the work force may also be subsumed here insofar as it extends the working hours of the household. In the case of over-time the capitalist is now compelled to pay extra for the extra surplus-value, and the intricate regulations governing this show its importance to him. In backward countries few such regulations exist, and here capital achieves higher absolute rates of surplus-value. The intensity of labour is increased with production line speed-ups, time in motion studies, and diminution of staffing levels relative to levels of production.(2) An increasing intensity of exploitation, Ceteris Paribus, increases the rate of surplus-value, and in this way it counters the tendency of the rate of profit to fall.
2. Relative surplus population. This stems directly from the rising organic composition of capital, where the increase in the variable capital in the process of expansion does not correspond to a sufficient increase in labourers employed to accommodate the total working population. This situation may have two related effects, both of which work through the mechanism of competition within the working class for jobs(3): a) the price of labour-power of the reserve-army of labour will fall, favouring the rate of surplus-value in those capitals which (thenceforth) employ them; b) the

'over-supply' of labour will depress its market-price across the board, below its value.

3. Cheapening of elements of constant capital. According to Marx, as the productivity of labour rises, the mass of the total product increases at a faster rate than the value of the improved means of production. Thus the value of the constant capital required for the production of a given commodity shrinks absolutely. This may raise the rate of profit while the rate of surplus-value is constant, but only so long as a capital stays ahead in the productivity of labour, and not if the increase in productivity is general. Otherwise, the market-value will be equalized with the individual value of commodities.
4. Foreign trade. Marx writes: "Since foreign trade partly cheapens the elements of constant capital, and partly the necessities of life for which the variable capital is exchanged, it tends to raise the rate of profit by increasing the rate of surplus-value and lowering the value of constant capital. It generally acts in this way by allowing an expansion of the scale of production." (4) The gist of this statement is not completely clear to the present writer because, on the one hand, it is difficult to conceive of the mere fact of exchange making goods cheaper, and on the other, if this works through the resulting expansion of production, itself consequent on either expanding imports or expanding markets, it is difficult to see how the effect could be general. The following interpretation is offered tentatively. The advantage of foreign trade must be distributed unevenly, and the most important units between which this distribution would seem to take place are capitals and countries. In other words, foreign trade has rewards for some capitals and countries at the expense of others. Firstly, it is clear that the expansion of trade into non-capitalist regions extends the market and opportunities for the realization of profits. In addition this could cheapen raw materials and food bought in backward regions. Secondly, trade between advanced countries is bound to be an advantage if a local capital can buy cheaper imported capital goods, and its labour-army can buy cheaper means of subsistence. And what applies in one direction also applies in the other. However, at the same time, capitals in both countries who produce a dearer good are bound to suffer. But when trade is expanding and the dearer goods of each

country are gradually being substituted for foreign imports the general rate of profit in both countries would tend to rise as uncompetitive local capitals were driven out. Thirdly, if a significant imbalance of trade arises, then there must come a point where the national capital of one country cannot be employed profitably in productive enterprise to a large extent. In this case changes in the general rate of profit would probably favour one country against the other.

This is not an exhaustive list of the counter-acting influences to the tendency of the rate of profit to fall. I do not think that Marx intended these to be taken literally as THE factors which reverse the trend of falling profit. There are many other factors which take effect at some times and not others, depending on specific conditions. It is appropriate I think to regard these as examples of some important factors only. But, even given the many counter-acting influences to the law, we would expect it to be expressed as a falling trend in the long-run. Instead we see both long-run trends of the falling rate of profit and long-run trends of its rise. Thus, on the one hand, capitalist development would appear to proceed independently of Marx's law, and on the other, it seems to be governed by accidental and indeterminate fortuities which the theory cannot account for. The restoration of the law to its former status requires that we explain, or make determinate, any apparent fortuities on a capitalist basis - that is, on the basis of Marx's theory of capital. In the following sections, then, I discuss the ways in which the total capital remains profitable at the expense of individual capitals, sectors, regions and countries. Where this type of advantage is involved, we term 'uneven development'.

### 3.2 THE RISE OF MONOPOLY CAPITAL

Despite its effects on the general rate of profit the primary means by which an individual capital may increase its rate of profit is to re-invest an increasing proportion of its profit in constant capital. This follows from the view, developed in the previous chapter, that each capital competes, not immediately with its own workers for a share of the value produced, but with other capitals for a share of the surplus-value produced.

The leading capitals stay ahead, or even leap ahead, in the introduction of labour-saving machinery. In a particular branch of

industry, this means that the cost-price of the single commodity falls further below its market-value. These capitals thus gain more leverage in the battle of competition. If the commodity sells at its social, or market-value, the capital has also realized an extra share of the surplus-value - which is consistent with the formation of prices of production. Insofar as the surplus-value is redistributed in this way, Marx says the capitals of higher composition receive a surplus-profit.<sup>(5)</sup> Within a branch of industry, surplus-profit comes to a capital to the extent that the individual value of its produced commodity is below the market-value of that type of commodity. The market-value of a commodity corresponds to the socially necessary labour-time for its production, and so it is the average of the individual values of all commodities of that type brought to market. A capital realizes a surplus-profit because it requires less labour-time than is socially necessary in the production of its unit-product, which, however, realizes the average or social value. This capital therefore produces at an above-average rate of profit.

Since some capitals produce at an above-average rate of profit, others must produce at below average rates. Within a branch of industry, however, competition tends to equalize these rates of profit, first by motivating capitals to pull back the leaders by introducing better means of production, etc., and secondly, by forcing uncompetitive capitals out of that line of production. In this way, big capitals get bigger, and small capitals are destroyed or wallow in backward spheres of production.

Being in a sphere of generally lower composition would not be so bad if not for the second axis in the attainment of surplus-profits. On the face of it, a branch of production with a lower composition should have a greater return of surplus-value. But as we saw in the last chapter, this surplus-value is redistributed between spheres over time, in the equalization of the rate of profit. In this way, surplus-profits are achieved both by-capital, and by-sphere.<sup>(6)</sup> This second axis again contributes to the growth of leading capitals (i.e., those labour-efficient capitals achieving an above-average rate of profit), and the underdevelopment of backward capitals - especially those in backward spheres.

The early phase of the capitalist mode of production, often called the competitive phase of capitalism, was characterized by competition precisely because there were few effective restrictions on the movement of capital into this sphere, or that, so capitals crowded in here or



there, wherever the best rate of profit was most likely. It follows that the equalization of the rate of profit between spheres was very rapid, and thus the pressure to stay ahead in labour productivity was very great. Yet, also because of these conditions, the capitals which won out in the battle of competition grew at an ever-increasing rate. The control of the greater portion of capital became concentrated in a smaller and smaller number of large firms. Smaller capitals were driven into backward spheres where "...competition rages in direct proportion to the number, and in inverse proportion to the magnitudes, of the antagonistic capitals."(7)

The concentration of capital produced a change of quantity into quality. That is, share size in the first place allowed the transition of the leading capitals from freely competitive capitals into monopoly capitals. 'Monopoly' means effective restrictions on the entry of other capital into a particular branch of industry. This means, firstly, that the market-price of the commodity produced here is independent of the law of value, because the lack of competition removes the imperative of selling at the social value of the commodity, or at a competitive price. In formal terms, monopolies are in the privileged position of being able to raise their organic compositions while other capitals in that sphere (effectively none) retain low compositions. Secondly, the monopoly capital does not enter into the equalization of the rate of profit, and hence the market-price is independent of the price of production which would otherwise exist for its commodity. Thus, a monopoly rate of profit exists along-side the general rate of profit. The monopoly may increase the productivity of its labour-army while its rate of profit need not decline with the general rate. Standing outside competition and the equalization of the general rate of profit, monopolies are not restricted in their level of profit or surplus-profit as other capitals are.

The concentration of capital thus conditioned a break, not in the fundamental structure of capitalism - the relation of wage-labour and capital - but in its secondary structures, the relation of capitals and sectors to each other. According to Lenin, the full development of competitive capital in Europe was realized in the 1860s. After the crisis of 1873 there followed a period of depression in which the growth of monopolies was consciously encouraged by their benefactors. There was a short-lived boom in 1889, after which the rate of profit rose only slowly until 1900 because of the stagnation of world trade. This was a

continuous period of concentration of capital. From 1900-03 there was a slump, which eliminated many smaller capitals which had continued to compete with larger firms, and monopolies emerged dominant from this crisis.(8) The change in the structure of capital was both cause and effect of this crisis. On the one hand, the concentration of capital was a natural consequence of competitive capitalism, and signified a falling rate of profit. On the other hand, we have the beginnings of a new form of capital, monopoly capital, which escapes the falling rate of profit and thus remains viable at the expense of other capitals.

### 3.3 THE TRANSITION TO IMPERIALISM, IMPERIALISM AND UNEQUAL EXCHANGE

Half a century ago, when Marx was writing Capital, free competition appeared to the overwhelming majority of economists to be a "natural law". Official science tried, by a conspiracy of silence, to kill the works of Marx, who by a theoretical and historical analysis of capitalism had proved that free competition gives rise to the concentration of production, which, in turn, at a certain stage of development, leads to monopoly. Today, monopoly has become a fact. Economists are writing mountains of books in which they describe the diverse manifestations of monopoly, and continue in chorus that "Marxism is refuted". But facts are stubborn things, as the English proverb says, and they have to be reckoned with, whether we like it or not. The facts show that differences between capitalist countries, e.g., in the matter of protection free trade, only give rise to insignificant variations in the form of monopolies or in the moment of their appearance; and that the rise of monopolies, as the result of the concentration of production, is a general and fundamental law of the present stage of the development of capitalism.(9)

The battle of competition produces a monopoly when only one or a few capitals are left standing. The same force which drives other capital out of a branch of industry prevents new capital from entering it, that is, the scale and efficiency of production. Since capital cannot flow into this sphere, the rate of profit may remain high and is not subject to the downward pressure of competition. This is equivalent to saying that the rate of profit of the monopoly sector does not participate in the formation of the 'general' rate of profit. There is another side to this of course. That is that the monopoly also circumvents the outflow of capital from a given branch of industry. This is done by adjusting prices inversely with demand. Under these conditions the monopolist has developed some autonomy from the grasping profit system. He can regulate production, productive capacity and prices. To a certain extent, then, the monopolist can determine his own rate of profit.

The extent to which a monopoly can continue to accumulate at a given rate, i.e., without a declining rate of profit leading to equalization of the monopoly and competitive rates of profit, is subject to definite

limitations. As we have seen, the total surplus-value produced and redistributed as profit cannot be greater than the total surplus-value produced. Hence, monopoly surplus-profits can only arise from two sources; 1) from the share of the surplus-value produced by the competitive sector, 2) from an increase in the social rate of surplus-value. An increase in the social rate of surplus-value will hasten accumulation of capital, and this in itself will mean a rising organic composition of capital which should, in the long run, push down the rate of profit. However, perhaps this decline can be wholly absorbed by the competitive sector. Ernest Mandel makes an interesting demonstration in this connection. Where Mandel refers to production in 'Department I', he means that grouping of firms which produce means of production. 'Department II' refers to the department of the economy producing consumer goods. (We will meet this distinction again in chapter 4.) A 'cycle' refers to one circuit of capital from the advance of money, and its division into means of production and labour-power, to its return as expanded value and re-investment in commodity capital. The value compositions of the capital increase according to this re-investment.

Mandel writes: "For the sake of simplicity we shall start from the hypothesis that Department I is entirely composed of monopolies, while free competition still predominates in the whole of Department II. Let us suppose, further, that production initially has the following value-structure, with the rate of surplus-value constant at 100% and an increasing organic composition of capital:

$$I : 4,000c + 1,500v + 1,500s = 7,000 \quad I$$

$$II : 2,000c + 1,200v + 1,200s = 4,400 \quad II$$

Under conditions of free competition, the equalization of the rate of profit between the two sectors would result in the following prices of production in successive cycles:

#### First Cycle

$$I: 4,000c + 1,500v + 1,750 \text{ profit} = 7,205 \text{ means of production}$$

$$II: 2,000c + 1,200v + 995 \text{ profit} = 4,195 \text{ means of consumption}$$

#### Second Cycle

$$I: 4,905c + 1,800v + 2,060 \text{ profit} = 8,765 \text{ means of production}$$

$$II: 2,300c + 1,400v + 1,140 \text{ profit} = 4,840 \text{ means of consumption}$$

#### Third Cycle

$$I: 6,005c + 2,160v + 2,450 \text{ profit} = 10,615 \text{ means of production}$$

$$II: 2,760c + 1,600v + 1,310 \text{ profit} = 5,670 \text{ means of consumption}$$

Now if, instead of an equalization of the rate of profit to 31% in the first cycle, 30.7% in the second cycle, 30% in the third cycle, and so on, Department I sought to secure a steady monopoly rate of 40%, then the redistribution of values would be structured as follows:

#### First Cycle

I:  $4,000c + 1,500v + 1,500 \text{ profit} = 7,700$  means of production  
 II:  $2,000c + 1,200v + 500 \text{ profit} = 3,700$  means of consumption

#### Second Cycle

I:  $5,350c + 1,850v + 2,880 \text{ profit} = 10,080$  means of production  
 II:  $2,350c + 1,250v + 220 \text{ profit} = 3,820$  means of consumption

#### Third Cycle

I:  $7,610c + 2,070v + 3370 \text{ profit} = 13,050$  means of production  
 II:  $2,460c + 1,300v + 0 \text{ profit} = 3,760$  means of consumption

Already in the third cycle it would become impossible to achieve the monopoly rate of 40%. Even if the non-monopolized sector made no profit at all - i.e., if production there came to a halt - the monopolized sector's rate of profit would have dropped to  $3,370/9,680$ , or to below 35%."(10)

Mandel goes on to show that if we assume a more modest monopoly rate of profit of 35% this will become unattainable in the sixth cycle, even if the profit of the competitive sector falls to zero. He concludes that even with an increase in the rate of surplus-value, "...the impossibility of maintaining the monopoly rate of profit would be postponed until the seventh, eighth or ninth cycle depending on the rhythm of increase.... The higher the monopoly profit over the average profit, the larger the monopolized sector, the faster must the monopoly profit drop to the level of the average social profit operative at the start, or decline together with it. The increase in the rate of surplus-value can merely retard this law, not abolish it."(11)

Although the individual monopoly is objectively more secure than the individual firm in the competitive sector it has still not freed itself completely from the law of value. It has no interest, on the one hand, in over-capitalising its sector, for this would be tantamount to the entry of capital in the branch of industry, and would mean that it had subjected itself to a falling rate of profit. On the other hand, it has

no interest in absorbing other, competitive sectors, which would be tantamount to the outflow of capital and would lead a tendency for the formation of a general rate of profit by eating away at the portion of the total social surplus-value available for redistribution produced by other, competitive capitals at lower profit rates. This is the objective basis of the extensive subcontracting system associated with the automobile and electronics industries, for instance, in Japan.

Up to a certain point in the development of monopoly capitalism this was not always clear. Centralization of capital reached massive proportions in the early 1900s and characteristically took the form of combination. The centralization of capital refers to the annexing of already existing capitals rather than the expansion of an enterprise through accumulation and concentration. Combination refers to a particular type of centralization in which vertically or horizontally (in the same branch of industry) associated firms are integrated or merged. The centralization of capital appeared in the push to the emergence of monopoly capital, but centralization has not played the same historical role as concentration. Once established, monopoly capitalism began to assert its qualitative divergence from its forerunner, competitive capitalism, and centralization played a fundamental role in this. It produced branches of industry where almost the entire productive capital was drawn into the sphere of control, and put at the disposal, of a few central executive bodies.

Profit returning to monopoly sectors could not be accumulated beyond a certain point, nor could it be excessively invested in other spheres without undermining the advantage of its own monopoly. It became clear that these returns had nowhere to go if not completely out of the realm in which the rate of profit equalized, and that meant out of the country. This is in fact what they did, beginning in the 1890s. The export of capital from the industrial centres sharply accelerated in the period between the turn of the century and the First World War, and it soon overtook the export of consumer goods. This not only signified the expansion of capitalism on a world scale, but also changes in the secondary structures of capital itself. Lenin provides the following data drawn from numerous sources(12):

Capital Invested Abroad (000,000,000 francs)

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Year	Great Britain	France	Germany
1862	3.6	---	---
1872 . . . . .	15.0	10 (1869)	---
1882 . . . . .	22.0	15 (1880)	?
1893 . . . . .	42.0	20 (1890)	?
1902 . . . . .	62.0	27-37	12.5
1914 . . . . .	75-100	60	44.0

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The export of capital to backward countries produced, and required, a highly developed and mobile finance capital. Credit systems had already developed within the most developed countries, culminating in banks and joint stock companies. Monopolies had no 'natural' interest in investing in these, since they (the monopolies) endeavoured to curtail the flow of funds in and out of their sector as far as was possible. At the same time, they might just as well have invested productively in a competitive sector rather than working through a bank and receiving a long-run rate of interest that is necessarily lower than the average rate of profit. A major mechanism for centralization was (and is) the takeover of the joint stock company. But this occurs predominantly within the parameters already mentioned - insofar as it does not involve the outflow of capital from a monopoly to a competitive sector. The finance capital which arose in association with the export of capital is quite distinct from the preceding forms of credit and finance. The money involved came precisely from the excess profits of monopoly sectors and was used for the development of industry in foreign, primarily backward, countries, especially those which had already been colonized. The interests of financial institutions which developed in this way were closely intertwined with monopolies, and, just as with productive monopolies, they did not contravene the imperatives of their own existence. In fact, by denying funds to selected firms they sought to strengthen their own position through the consolidation of the joint interests of their productive and financial 'branches'.

Just as we found that the 'over-ripening' of competitive capitalism led to massive concentration and monopoly, we find that the distension of monopoly capital resulted in imperialism. This is a doubly 'ingenious' solution to the problems of monopoly (we shall see in the next section that it was by no means perfect); on the one hand, it dissipates excess capital, and on the other, it finds a new source, not only of profits,

but of surplus-profits. While monopoly capital per se draws its surplus-profits at the expense of other sectors and capitals, under imperialism two further sources of surplus-profits are added to these - other countries and other regions. Thus, competitive capitalism leads to uneven development of firms(13), some grow large and some small, and this leads to monopoly. Monopoly furthers the uneven development of firms and, then, sectors and leads to imperialism. With imperialism we move to a world scale, with the addition to this list of uneven development of countries and regions of the globe.

The conditions under which capital was exported represent the basic characteristics of imperialism. These conditions, and thus imperialism itself, were partially engineered by the monopolists, signifying simultaneously their continued autonomy from the underlying self-destructive logic of capital, and their total domination by its self-expansive tendencies. The first condition for the export of capital is some degree of political influence in the host country. Primarily, this is required to ensure that the local population, with its own class or stratification system can be fitted into, and kept within a capitalist structure. That is, for example, that the land market works according to the laws of supply and demand, that the unpropertied classes respect private property and are aware of their own need to work to gain it, that industrial interests are not spoiled by war or invasion, and so on. Insofar as the national governments of advanced countries played uncle to capital as a whole, they rushed to secure territories for its expansion. Until about 1875 'colonization' signified no more than the term would suggest, and had no necessary connection with imperialism. However, around that time the colonial policies of major powers underwent a turnaround. In a fairly specific period the major powers attempted to consolidate their grasp of outlying areas as it became clear that this would assist national development as a whole. The Crimean War was fought before this period on behalf of competitive commercial capital (i.e., over entry to markets), and the First World War was fought over the redistribution of territories, not over the original division of the world. In the intervening period, large parts of the world were claimed by nation-states as the exclusive domains of investment of particular national monopoly capitals. It is interesting to note that the United States had gained independence well before this consolidation and was not subject to it, and that Britain, which was slow to erect trade barriers, began to decline as a world power.(14)

Secondly, where independent governments existed, inter-monopoly competition could persist in given branches of production, and this was disadvantageous as it could annul the barriers to further competition. Therefore, international cartels were often formed which divided the 'free' world up amongst themselves into mutually agreed territories. Lenin cites the case of the agreement between the General Electric Company of the United States and General Electric (A.E.G.) of Germany. These two trusts were effectively the only two companies producing for their particular market, since no smaller company operated completely independently of them. In 1907 these companies divided up the world as follows: The American company got the U.S. and Canada, the German company got Germany, Austria, Russia, Holland, Denmark, Switzerland, Turkey and the Balkans.(15) Thenceforth, major competition ceased.

Thirdly, there are the economic facts of the matter, and these are by far the most important, for without them the political and inter-imperialist arrangements would have no reason for being. Capital migrated to backward countries with the richest potential for the production of raw materials. Land in these areas had to be cheap and of a suitable quality for growing cotton or containing deposits of copper, for instance. Land was generally cheap, but where it was not, the political arm of imperialism stepped in. An ample work-force was desirable, as this depressed low wages still further, below the value of labour-power. A lack of capital was also desirable, and this followed by definition in the first place, and from the efforts of colonial governments thereafter.

At the same time as the production of raw materials was drawn into the capitalist sphere, the capital which utilized these raw materials in the advanced countries was also expanding, and the former was both cause and effect of this expansion. Raw materials were previously produced in backward countries, but not on this scale, and not according to capitalist principles. They had been produced in a pre-capitalist framework, which was accompanied by primitive accumulation. The importance of primitive accumulation in the emergence of an indigenous bourgeoisie and a level of development of the productive forces which facilitates accelerated accumulation cannot be over-emphasised. Primitive accumulation precedes, and forms the historical basis of, capitalist production.

Imperialism systematically advantages the advanced and disadvantages the backward party. First, the capitalist as opposed to non-capitalist



production of raw materials uses labour more efficiently, and thus cheapens the price of raw materials in the industrial centres. This tends to retard the decline of the rate of profit 'at home'. Secondly, because of the formation of a general rate of profit in the particular branch of production, the more labour efficient production of the capitalistically produced good meant that the profit was greater than the produced surplus-value per unit-product. In other words, the surplus-value realized in the redistribution of surplus-value according to prices of production favoured the capitalist sectors. This extra realized surplus-value is none other than the type of surplus-profit we have already described. Thirdly, this type of surplus-profit extraction is disastrous for the national production of the backward country. It did not mean that the country's capitalists received sluggish returns; it meant that the more vulnerable primitive accumulation which forms the historical boardwalk of capital was destroyed! Hence, indigenous capital hardly developed at all. Characteristically imperialist firms tried to drive their advantage home by monopolizing industry in the host country. In the light of national liberation struggles, imperialist states attempt to counter-balance this with loans, foreign aid and so on. However, such aid is not a solution but merely defers the problem. Ultimately, it is transferred to the monopolies as surplus-profit. Thus, the 'developing' nation becomes totally dependent on the imperialist metropole, and its continued 'development' depends on its usefulness as a cog in the imperialist profit machine.

This is the situation of foreign capital within the host country, but there is yet another way in which the advanced countries are advantaged by imperialism. There is still the differential between the labour-unit productivity in the backward country as a whole, including the foreign concerns, and the advanced country. This differential is the secret of the unequal exchange which occurs between less developed and more developed countries. Unequal exchange essentially refers to the fact that a product which took more man-hours to produce is exchangeable only in the same ratio as the same product of an industrial country which took less man-hours to produce. Put another way, if a backward country exports a commodity package which embodies one million man-hours of labour, it may receive in exchange for this commodities which took 300,000 hours of labour to produce.

Now this unequal exchange of labour-time was undoubtedly more pronounced under pre-capitalist production, but with this difference, that the whole of the population is employed productively. Under these conditions the backward country would be able to establish indigenous capital accumulation, or a combination of indigenous and foreign capital accumulation provided it could muster sufficient political and military potential to erect trade barriers to prevent the importation of capital. This is what occurred in the United States at the time of the Declaration of Independence. When imperialism sets in, trade barriers are also erected, but these are to protect foreign investment. Because capitalist production is nationally more efficient, it throws out all its competitors, but employs only a fraction of them as wage-labour, i.e., precisely because it economizes labour. The excess population must turn to only marginally productive activities. From this point on, the backward country cannot utilize its own natural resources because of lack of capital and may even be forced to sell them to foreign capital; it cannot achieve an average rate of profit on the small capital that does survive because this is invested in competitive, primarily service, sectors; and it cannot utilize its full work-force because of the deformed proportion of capital, technology and labour-power. This constant bane of underemployment has further costs to the state in that, at a certain stage of impoverishment, the exploitative nature of imperialism becomes very clear. There is a tendency toward 1) national liberation, and 2) worker movements. These cannot be bought off with all the modern concessions to the working class, because they are not employed, but marginal, and so must be repressed, as happened in the poorer, backward countries like those of South East Asia. Who pays for this is always a contentious point. The imperialist nation would prefer that a government be formed by a national bourgeoisie which, in line with the interests of capital generally, provides the conditions of reproduction itself. As far as is possible, the granting of independence to colonies proceeds to the extent that this condition is met.

While the unequal exchange of labour-time became less marked under imperialism (i.e., the productivity of backward countries as a whole rose with the introduction of capitalist production), imperialism itself pre-empts the possibility of this ever being totally abolished because it blocks the development of national capital. Moreover, the imperialist nation attempts to protect its foreign investments by disenabling the entry of capital foreign to it into 'its' backward country. Objectively,

this is an attempt to prevent the equalization of the rate of profit internationally. If any country could export its excess capital to the location with the highest rate of profit, that profit rate would soon be driven down by competition. This investment and competition would continue to raise the efficiency of production and lower the rate of profit until it was equally profitable to invest 'at home'. Under these conditions a developing country would in fact develop very rapidly to the average level.

While the foreign capital trades more for less labour with the imperialist countries, it also trades less for more labour when it buys services or raw materials from local competitive capital, in accordance with productivity differentials. This situation is exacerbated, moreover, because infrastructural and para-military costs are met by taxes on those least able to pay. This follows primarily from the governmental imperative to retain capital investments in the country (where its own potential for the development of capital has been destroyed), which means offering a 'profitable milieu'. Under imperialism, then, foreign investment yields the highest long-run rate of profit of all invested capital, but this is a disadvantage to the recipient country.

### 3.4 LATE CAPITALISM, TECHNOLOGICAL INNOVATION AND THE STATE

As soon as capitalists accommodate both the falling rate of profit and the law of value (i.e., maintain their rate of profit through withdrawal from the equalization of the rate of profit) with the formation of monopolies, capitalism can no longer be analysed using only the most general laws of capitalist accumulation. Monopolies further the accumulation of capital precisely by dodging the self-destructive logic inherent in the general formula of capital, under conditions of generalized commodity production. What can be said about monopoly is that it accommodates but does not invalidate the laws of capitalist accumulation. This is a structural proposition, which has no hard and fast conjunctural correspondant (i.e., empirical test at any given time).

But, we have seen that monopoly was not the last word in the struggle of capital with its nihilistic tendencies. Out of it rose imperialism. In making a general description of imperialism, we could not go far, for structurally imperialist capital is ultimately identical to all other capital but conjuncturally it takes a different form and exhibits

manifold but superficial deviations from logically derived course of capitalism in general. We were interested primarily in its typical source of surplus-profits - unequal exchange.

The competitive phase of capitalism lasted until about the last quarter of the nineteenth century. The stage of imperialism started at about the turn of the century when monopoly capital had emerged fully from the competitive phase. In this section I discuss the latest phase of capitalism, which can be dated from about the beginning of the Second World War. Ernest Mandel has dubbed this phase 'Late Capitalism', and this is how I shall refer to it.

The major reason that exported capital was invested in the production of raw materials as opposed to other branches of production is that the price of raw materials had been rising both absolutely and as a proportion of the cost-price of commodities, prior to 1900. The absolute price rise was felt first. It resulted from an increased demand which followed the expansion of capitalist, raw material-consuming industries in developed countries as compared to the slower extension of pre-capitalist-type, raw material-producing sectors in backward countries; and from the relative diminution in the value of gold with the exploitation of the Transvaal and the application of the cyanide process (1849, 1890). These trends evoked an extension and improvement of the means of communication and transport (especially steam ships and railways from 1848). However, the relative increase in the price of raw materials was probably more important.

With the drive to accumulate, a bi-valent tendency arose in industrial nations. On the one hand, the organic composition of capital rose unevenly, and leading capitals tended to move further ahead, on the other hand, the competition which arose out of the tendency of the rate of profit to equalize, tended to equalize the organic composition of capital across sectors. Thus, while the level of development of productive forces remained uneven, the average organic composition of capital rose. This meant that the labour saved by new technology was greater than the extra cost of that technology (relative decrease in the value of means of production), and that the labour-power now required was cheaper (cheapening of means of subsistence). Now at the same time, the labour efficiency of backward, raw material producers was rising, if at all, only slowly (i.e., was decreasing relatively), and this meant that with the increase in the number of commodities produced per unit of capital

(means of production and labour-power), the value component of raw material in each commodity increased. Moreover, with the general diminution in the value of commodities in the industrial centres, a greater quantity of them had to be exchanged with backward regions at a given exchange rate. This meant that the price of raw material relative to the prices of other factors of production increased.

The trend of rising raw-material prices, and the greater raw-material component in each commodity, turned back on the accumulation of capital and limited this. For every increase in the organic composition of capital, there was then an ever smaller increase in labour efficiency because of the rising composition of raw material to other circulating and fixed constant capital.

In other words, while advances in the technological component of capital were exponentially cumulative, this was only arithmetically expressed in the increase of labour efficiency as a whole, because this included an independent variable which was relatively constant - the raw material value, or low level of productivity in a non-capitalist sphere. Thus, the rate of technological innovation in the industrial centres was decreasingly reflected in the rates of profit of leading capitals, and this can ultimately be traced to the slow advances in labour productivity in raw materials production, which fell outside the capitalist system. Accordingly, the solution which capital found was to draw the production of raw materials further and further into the capitalist sphere.

Monopoly capital made full use of imperialist conditions, so was able to locate in backward countries. Not only did the price of raw materials to metropolitan capital decline under imperialism, but surplus-profits arose. However, from about the period of World War One, the price of raw materials began to rise again! At first sight, it may seem that, since the law of value is temporarily inoperative between countries - which is to indicate no more than the possibility of unequal exchange - unequal exchange may be advantageous to both countries. Since the capital in the backward country has a higher national rate of profit, based on a much higher labour component, could it not accumulate at a much quicker rate because of, not despite, unequal exchange? In other words, if a backward country has a rate of profit of 60% and an advanced country a rate of 10%, the exchange of the products of their respective capitals - say, two types of constant capital - represents to one a 60% re-investment rate and to the other a 10% re-investment rate, since, looked at in terms of

their own national level of productivity, that is precisely what they would be. Hence, the foreign capital should accumulate at a faster rate and quickly over take its metropolitan partner. This, however, did not happen.

Given the low cost of reproducing labour-power in the backward countries, it was in the first place more profitable to increase the extent and labour-intensity of production rather than capitalize it. This kept the productivity of labour low, and so the labour-unit productivity ratio varied with the increasing organic composition of capital in the metropolises. Hence, with rapid increases in the productivity of labour in the industrial centres, the relative price of raw materials began to rise as soon as the level of technology which accompanied the flow of capital into raw materials production began to stabilize.

At this time in the history of capitalism the depression of the 1930s occurred. Beginning in the '30s and accelerating in the '40s a major overhaul in the plant of outlying raw-materials producers took place, as well as a restructuring of the organization of labour, and this was conditioned by the rising price of raw materials.(16) This had profound consequences, for the greater the investment necessary to extract raw materials from developing countries, the less attractive it became, because the incentive of low costs for the reproduction of labour-power diminished in the same proportion as the labour component of production diminished. As the prerequisite level of investment in fixed constant and variable capital in developing countries increased, it drew nearer to the hitherto 'uneconomic' costs of extracting raw materials closer to home and of investing in expensive machinery to produce synthetic raw materials in the metropolises. Much of the research for this latter enterprise was a spin-off of military applications in two World Wars and the Cold War.

In the period of late capitalism, we have seen a continuous technological revolution (since about 1940). This is a product of two economic facts. With proportionally less investment in foreign countries, an important source of surplus-profit has dwindled, and with the reorientation of surplus-profit extraction around levels of technology 'in one country', competition now reasserts itself. This competition has changed in form, and it is more apparent than ever before that it is, by nature, competition for surplus-value. There is no question now of competitive capital flowing en masse into monopoly sectors. Such an

undertaking is far too great. Rather, the monopoly and competitive sectors now compete stridently, as evidenced by the growing emphasis on marketing. Moreover, monopolies cannot now avoid competing with each other, as evidenced by the rapid and far-reaching advances in the levels of technology they employ to maintain above-average rates of profit.

A major problem for monopolies now becomes over-production of their commodities and momentary over-capacity of fixed-constant capital. Late capitalism has at least one inherent counteracting influence here, and that is the increasing need for investment in unproductive spheres, especially science and technological research and development. The increasing cost of staying ahead in the development of labour-efficiency means, however, that the level of development of productive forces must race forward with leaps and bounds if it is to justify itself, and it is imperative for reproduction that it does. Another major counteracting influence to the distended growth of capital is in the search for new markets and market-shares. Capital must find markets, and thus it simultaneously attempts to 1) open up new export markets in countries not drawn completely into the capitalist world economy, 2) compete for existing foreign markets with available or new products, 3) create new products and thus new demand, 4) expand its share of the domestic market with new or existing products. This activity has the concomitant, and again happily unproductive, requirement of expanded marketing divisions and marketing budgets. A third important counteracting influence, also perpetrated under competitive conditions, is the expansion of capital investment into (primarily service) sectors not traditionally capitalized, for example, ready-to-eat meals, food and drink dispensing machines, professional sport, entertainment (including video games, movies, hotels, television), security services, tourism, appliance repairs, retail 'chains', commercial art, education, science and medical health care.

This competitive struggle tends to equalize these monopoly firms insofar as their ability to extract a certain return is concerned. And, of course, it evens out their potential at below their desired operating profit and level of growth. This is the situation of the world economy at present. It is not the place here to speculate on the possibility of the emergence of yet another source of surplus-profits, but what can be said is that the engineering of continued reproduction, of profits in the last instance, has increasingly passed from the hands of the individual

capitalist firm with its plan to increase its organic composition, into the hands of the state. The state tends to act in the interests of the national capital as a whole and so in its economic programming tries to expand, not any single capital, but capitalism. Its economic programmes thus over-ride the individual imperatives of competition. Most governments use Keynesian policies in these programmes. However, while these are of definite assistance in the short-term, they can never resolve the problems of late capitalism, but only defer them. The following are examples:

1. The state can assist in the development of technology, but this must be restricted to types of technology which assist realization on export markets or make the 'nation' more competitive internationally. Innovations for the domestic market are left to the traditional inventor, as the recent television series 'Production Line' showed. The New Zealand government operates such a scheme through the Department of Scientific and Industrial Research (D.S.I.R.), and agricultural colleges.
2. The export market may be encouraged with government assistance. For example, the Meat Marketing Board.
3. The domestic market may be stimulated through the nationalization of industries and public works (these may be carried out by government departments, or better still, contracted out). The idea is to put more money in the consumer's pocket, but this must not be done at the expense of (in competition with) existing capital. Hence, in New Zealand where there is an absence of Department I industries (production of producer goods), heavy industrial projects are sought to stimulate demand where a government department or a foreign contractor is involved, and other schemes, e.g., construction, are sub-contracted to New Zealand firms.

The expansion of capital into service sectors is not generally encouraged by governments because of its internally competitive nature. While not discouraging this practice, e.g., under the Commercial Practices Act, it is generally left up to economic factors. The New Zealand government in fact encourages the internal sectoral status quo. It provides, for example, direct subvention of the small New Zealand farmer's losses with Supplementary Minimum Prices (S.M.P's) for his main products. Moreover, we have recently seen moves (which may be interpreted as advantageous to the capitalist economy as a whole) to provide incentives to found new small businesses, or extend existing ones, which



involve, on the one hand, reducing the value of labour-power, and on the other, lowering interest rates. The strategy of lowering the value of labour-power must be seen in the context of 'Think Big'. If the government can lower the price of production of goods through wage cuts whilst simultaneously stimulating demand by employing workers in a non-competitive sector, rates of profit may be maintained. In the most advanced countries, this is done with a 'permanent arms economy', among other things, which also has advantageous technological spin-offs. In New Zealand it is done with large-scale energy projects, which depend on an inordinate level of credit receipt, or 'overseas borrowing', in times of recession.

A certain level of 'overseas borrowing' is sustainable by a government provided its excess money requirements are short-term. At this stage also, it is in the interests of foreign capital to support less developed countries, for this supports demand for their exports. At a certain stage, however, 'overseas borrowing' is transformed into 'debt servicing', or borrowing to repay previous loans. Now, debt servicing, apart from requiring some delicate negotiation, is, in itself, no real problem. The problem arises when there is no end to the round of borrowing and repaying. At that point the capitalist economy reveals itself as an aimless game of 'money-go-round', which is incompatible with the social nature of mankind - it leads to lower standards of living, unnecessary ailments, malnutrition and war.

Is there an end to the current round of borrowing? The government's answer is that the 'Think Big' energy projects will attract investment which will lead a national up-turn. That argument, as far as it goes, seems quite plausible. The flaw is that investment in energy-intensive industries on a big scale will require the prior curtailment of the so-called world-economic recession. When this will happen, and why, is by no means clear. In reality, the government is staving off a crisis in New Zealand society and at the same time (in the same act) preparing to make the most of the postulated new world economic boom.

Finally, we must go back to the underdeveloped countries and see what has happened there in the period of late capitalism. When the proportion of capital invested in the production of raw materials in developing countries declined, their overall relative level of development declined even more rapidly. They were now thrown into a competitive situation with metropolitan capital in which they fell progressively behind because of

the advances in the level of technology in the metropolises, the proliferation of substitutable finished goods using other raw materials (plastics, vinyl, synthetic fabric) and the increased amount of exploration nearer to the metropolises (e.g., North Sea oil). The general lack of indigenous capital to float the economy is the final contributing factor which keeps these nations dependent on industrial countries. The situation of poverty and dependence leads to political unrest on the one hand, and a constant round of debt servicing on the other. Decades of the artificial maintenance of national exchange rates to contain social unrest and achieve party political goals, moreover, culminates, at a certain stage, in massive devaluations and galloping inflation.

The tendency toward dependence is in fact a major counteracting influence to a spiralling downward trend in the economies of backward countries. Metropolitan countries send aid to defer this falling tendency of the national economy and, ultimately, of the nation as a whole. Such 'aid' is of course repayable (theoretically) and often has such conditions as reciprocal trade agreements, etc. It is therefore a politically and economically rational extension of capitalist logic.

The second counteracting influence has its roots, not in the nature of the state under late capitalism, but in its other major feature - technological innovation. The permanent technological revolution in late capitalism constantly increases the rapidity with which the level of development of productive forces rises. But it has another side: it increases the rapidity with which a given set of means of production are outdated. Thus, the moral/historical life-time of the means of production grows ever shorter. At a certain point in the development of this trend, depending on the branch of industry and the sector, the turnover time of fixed capital becomes so short that it is profitable to export outdated technology to underdeveloped regions and thus complete its valorization under conditions of (by now) super-low costs of the reproduction of labour-power. In the short-term this is a boost to underdeveloped national economies, and much encouraged by the state here. In fact, in certain sectors some countries court this type of foreign capital with many concessions including 'free trade zones', to achieve temporary relief such as 'export led growth'.

Capital which has returned to underdeveloped regions in the last two decades or so is multinational capital. It gains its multinational character partly from the way in which it valorizes its out-dated fixed

constant capital. If we ask what sort of technology it exports and to where, we will find that this is also predictable. Generally, the capital must be invested in a line of production and a technology compatible with the advantages of labour-intensive processes such as manufacture, machinofacture, and assembly and packaging. Secondly, it must locate in a situation of coexistent poverty and stability. Under conditions of poverty, a dictatorial government and a large local para-military presence is often required to ensure political stability. Thirdly, it is more profitable to locate a capital concentration as close as possible to its potential market and to its raw material supply.

This is the objective basis of the 'New International Division of Labour', which Frobel et al. had discerned by 1965.(17) As a counter-tendency to spiralling collapse, it appears differentially. In some places it has clearly contributed to the continuing 'development of underdevelopment', such as in Latin America. In other places it seems to be working. In a string of East Asian countries - Singapore, Hong Kong, Malaysia, Phillipines, South Korea, Taiwan, and others - growth under the influence of foreign multinational capital has been very rapid. The advantages to these nations, independent of multinational capital, however, have been mainly infrastructural and military. Multinational capital is still mobile, and could conceivably find more profitable places to invest. Such a move would have profound ramifications. The military and infrastructural advantages are not a result of international investment but rather a ploy to attract more of it. They go hand in hand with low company taxes, which means that the costs of producing the magnet are taken up by foreign 'aid'. Foreign debt must be serviced, which means that disproportionately more investment must be attracted, which requires foreign 'aid', and so it goes. Far from the complete withdrawal of capital, a significant deceleration of investment would see these countries trying to pull themselves up by their own boot straps. Moreover, under conditions of underemployment and a necessarily low price of labour-power, more pressure has been put on the military as investment has slowed with the recessions of the 1970s. The very small ruling elite which such an economy can support comes under increasing pressure from an impoverished population if it cannot promise improvements. At that stage, the loyalty of the military is also in question, for their platform for repression is also medium-run economic and social improvement, and hence 'outside' military support is often sought.

### 3.5 UNEVEN DEVELOPMENT AND THE SOURCES OF SURPLUS-PROFIT

The primary aim in the foregoing analysis is to expose the answers to the question contained in the quotation at the beginning of this chapter: why is it that under conditions of the rapid rise in the level of development of productive forces the tendency of the rate of profit to fall did not cause a total collapse of the system long ago? We found that there were some counteracting influences to the tendency logically entailed in the system. In addition, we looked historically at the development of the capitalist mode of production and found three sources of surplus-profit which assist the advance of the leading edge of capital against the falling rate of profit in more or less discrete historical phases. The important aspect of these historical phases was not, however, their time and place, but their particular conjunctures of capitalist production and circulation turning upon, or developing dynamically from, the nature of capital itself.

Under competitive capitalism the extraction of surplus-profits asserted itself as the conquest of certain capitals by others. But it was here difficult for any capital to retain a long-term advantage in any particular sphere as other capitals moved in quickly to equalize the rate of profit. However, those capitals that moved quickly enough were able to grow at a fast rate, and this produced the 'simple-monopoly' which is identical to the massive concentration of competitive capital. Monopoly capital could thenceforth extract surplus-profits by sector, which caused uneven development here. Classical imperialism compounded this with unequal exchange between countries and regions of the globe, and thus underdeveloped already backward countries. Under late capitalism the extraction of surplus-profits combines all these mechanisms. The leading capitals now dominate other capitals, sectors and countries by combining advanced technology, massive concentration, mobility and political influence.

From this analysis, which does no more than follow the historical logic of capital, we can conclude that the uneven development of firms, sectors, countries and regions is an inherent law of the capitalist system. It is, in the first place, an expression of the attempts of each individual capital to maximize its profits, but it becomes a mechanism by which the leading capitals may draw the system on to new heights precisely because the bad effects of capitalism can be put on to the shoulders of less advanced regions, countries and sectors, and their

labour-armies. When we set out to analyze a country like New Zealand, it is important to remember the schema of uneven development. Not only can we periodize the history of New Zealand and understand it in terms of the dominant type of capital or capital relations existing in each period. When dealing with a specific period, we can also understand New Zealand's national-international articulations in terms of national, imperialist and multi-national capital, and its economic development in terms of sectors and more and less advanced firms. Moreover, in the late capitalist period we must understand the role of the state and its national-international articulations as a consequence of a certain level and quality of uneven development and a given nation's place in the schema thereof.

Our survey of history has revealed successive periods of the capitalist mode of production. Our treatment of the late-capitalist period shows that in moving through history we are simultaneously moving away from the pure structural analysis of the laws of the mode of production as such, and toward a conjunctural analysis - or rather, the recognition of their unity as well as their contradistinction. This logical movement is not removed from but reflects the historical development of capitalism.

## NOTES TO CHAPTER III

1. Marx, K. (1977) Capital Vol.III. Moscow,Progress. p.232.
2. "Everything that promotes the production of relative surplus-value by mere improvement in methods, as in agriculture, without altering the magnitude of the invested capital, has the same effect."(Marx (1977) Capital. Vol.III. p.233.)
3. "The competition thus created between the labourers allows the capitalist to beat down the price of labour, whilst the falling price of labour allows him, on the other hand, to screw up still further the working-time."(Marx (1978) Capital. Vol.I. p.513.)
4. Marx (1977) Capital. Vol.III. Moscow,Progress. p.237.
5. "If the ordinary demand is satisfied by the supply of commodities of average value hence of value midway between the two extremes, then the commodities whose individual value is below the market-value realize an extra surplus-value, or surplus-profit, while those, whose individual value exceeds the market-value, are unable to realize a portion of the surplus-value contained in them." (Marx (1977) Capital. Vol.III. p.178.)
6. "The special productivity of labour in any particular sphere, or in any individual enterprise in this sphere, is of interest only to those capitalists who are directly engaged in it, since it enables that particular sphere, vis-a-vis the total capital, or that individual capitalist, vis-a-vis his sphere, to make an extra profit." (Marx (1977) Capital. Vol.III. p.198.)
7. Marx (1978) Capital. Vol.I. Moscow,Progress. p.578.
8. Lenin, V.I. 'Imperialism the Highest Stage of Capitalism' In selected Works (1977) Moscow,Progress. pp.180-81.
9. Ibid. p.180
10. Mandel, E. (1980) Late Capitalism London,Verso. pp.531-3.
11. Ibid. pp.534-5.
12. Lenin, V.I. op cit. p.213.
13. I am neglecting here the disparities which arise naturally on a capitalist basis between regions within a country, especially between town and country. The latter is a function of mass production which concentrated the capital and the workers at the one location, i.e., in cities.
14. See Andrew Gamble's argument in his Britain in Decline. Chpt.2 - "...the very success of British industrialization and the policy of free trade created the first great world capitalist boom during the 1850s and 1860s. Aided by exports of capital and machine tools from Britain, several other states began to industrialize extremely rapidly....The industrialization of the world economy, and the resulting development of the accumulation of capital on a world scale, meant that the predominance of British naval and commercial power came under threat....To protect themselves from British competition, every strong nation-state seeking to industrialize protected its industries with high tariffs, designed to shut out British goods, whilst denouncing free trade as a hypocritical policy designed to promote British industry at the expense of the rest of the World....The course of the hundred years decline was shaped by two

momentous choices. The first was the continued adherence to free trade and to the institutions of the liberal world order long after the conditions which had originally recommended it had disappeared." (Gamble (1981) Britain in Decline. London, MacMillan. pp.52,53,58.)

15. Lenin, V.I. op cit p.218.

16. Mandel, E. op cit p.62.

17. Frobel et al. 'The Tendency Toward the New International Division of Labour.' Review. Vol.I. No.1, Summer, 1977. - "Our main thesis is that, roughly speaking in the 1960's, the new set of conditions for capital expansion and accumulation became effectively operative, resulting first of all in industrial relocation of manufacturing, in the beginning mainly in labour-intensive production processes (or in processes where labour-intensive techniques can effectively be substituted for more capital-intensive ones)."

## Chapter IV

### REPRODUCTION AND REVERSAL

In the second chapter we saw how the individual capital is influenced by the working of the law of value on a social scale and how the individual movements of capital thus governed, when aggregated, produced at the social level the opposite of their desired effect, i.e., a tendency for the rate of profit to fall. We saw in the third chapter how the leading capitals counter this overall tendency and the effect this has had in the history of capitalism. In this chapter I wish to pursue the theme of the intertwining of the movements of individual capitals and the motion of capital (development of capitalism) on the total social level, as they present themselves to us - each, that is, as both cause and effect of the other. We turn here to the possibility of crisis. With a certain body of theory behind us, this possibility is transformed from a formal into a real possibility to the extent that the preceding analysis reflects the true nature of capitalist society. The argument begins in the first section with the conditions under which the reproduction of capital might conceivably follow a smooth and uninterrupted path. In Section 2 I look at some real contingencies under capitalism which divert it from this path. In the final section I look at the situation of capital specifically in New Zealand, and the intervention of the state which its reproduction necessitates. New Zealand represents a special case. New Zealand's production is concentrated largely in the consumer goods sector, and therefore its surplus -value must be realized in the export trade, because the consumption of workers employed here corresponds mostly with the variable part of capital. This is mentioned here so that the reader may begin to appreciate the ways in which the reproduction schema presented in the first section, and the sources of disruption to it, would apply to this country. While the general schema of reproduction, and its flaws, throw light on the causes of capitalist crisis, the "specialness" of the New Zealand case explains the aspects of crisis peculiar to it, and the particular role of the state in New Zealand. However, these particulars are wholly subsumable under the general sources of crisis, which in turn define appropriate government responses, and so we must develop the general framework first.



#### 4.1 THE POSSIBILITY OF REPRODUCTION OF THE TOTAL SOCIAL CAPITAL: A TWO DEPARTMENT MODEL

We saw earlier the metamorphoses which capital must complete in order to remain as capital or expand its value, or reproduce. The metamorphoses were represented thus:

$$M - C \dots P \dots C' - M'$$

I used this formula as an abstract model for the turnover of capital in each individual firm and for capital in general. It is clear that a person must first have money to turn himself into a capitalist. The money must be used to purchase means of production and labour-power. The latter must be set to work on the former in a labour-process for a sufficient period of time such that the commodity-product has a greater value than the original money advanced or the commodities it bought. Finally, the commodity-product must be sold on the market, and the surplus-value thus realized. In considering the actual history of the mode of production, we quickly left this level of abstraction behind us, but even in its abstract form the model entails all the possible causes of disruption to the extended reproduction of the firm. For instance, if a person is a worker or if his primitive accumulation is destroyed, he will never have the money to invest capitalistically in the first place. If there is a shortage of means of production - e.g., raw material or labour-power - he may not conclude the circuit. Likewise if the production process is disrupted by class struggle, and also if he cannot sell his products, or if he can sell them only at a below-average rate of profit. For whatever concrete reasons these circumstances may come about, the result is the same.

Now this formula at the same time explains everything and nothing. I have explained that the individual firm which is failing cannot, for instance, sell its commodities to realize a profit. However, in reality this is mere tautology - all capitalist crises involve the inability of firms to sell their goods, or to sell them at an adequate price. We must ask, what are the concrete reasons for the realization crisis, (e.g., lack of effective demand) and what are their causes? The question which is perhaps the most difficult is: why should there be any such problems at all? To answer these questions we must set out the requirements for the smooth reproduction of capital, and then look at the real historical conditions which it develops, and which must pre-empt uninterrupted growth.

Marx's reproduction schema is set out in the twenty-first chapter of Capital, Volume two. In this abstract approximation to reality, Marx conceptualizes the capitalist mode of production in two departments. Department I represents the branches of production which produce means of production, and Department II, the branches which produce consumer goods. A two-department model is by no means a logical requisite. Marx might have had a department for, say, gold production, or for the production of means of production of means of production. In fact, there is a third department with which Marx sometimes worked, and that is the department which produces luxury goods. This department is of particular interest in respect of the increasing mass of capital involved in the production of 'means of destruction', which paradoxically fall under the heading of luxury items.(1) For my purposes, however, the two-department model will be adequate to locate the basic combination of value and use-value structures of the total commodity package within which growth can occur. As an analytical tool, the two-department model corresponds to the structure of all societies (which is to say, essentially, modes of production) insofar as they require means of production and labour-power to reproduce themselves, and it corresponds to the specific structure of the capitalist mode of production insofar as these are commodified, and we treat them as such. Thus, the departmental value composition of society is represented in the following form:

$$\begin{aligned} &Ic + Iv + Is \\ &IIc + IIv + IIs \end{aligned}$$

For reproduction of the total social capital to occur, it is necessary that exchanges between the two departments balance each other in value terms. This implies that the specific use-values of the commodities produced in both departments correspond to their mutual needs. Hence, the following equation must be satisfied(2):

$$\begin{aligned} &Iv + Is/x \text{ (unproductively consumed by capitalists)} \\ &\quad + Is/y \text{ (accumulated in the form of variable capital)} \\ &= IIc + IIs/z \text{ (accumulated in the form of constant capital)} \end{aligned}$$

(Where x,y and z are nominal divisors indicating no more than that the surplus-value is divided, or goes into different 'funds'.) The unstated value terms either partake only in simple reproduction (that is, merely reproduce themselves) or need not flow between departments. They are:

1.  $Ic$  This merely replenishes itself through exchanges within the department.

2.  $I_s/p$  This is accumulated as constant capital through exchanges within the department.
  3.  $II_v$  This is paid in wages to the workers of Department II and comes back to capital through the purchase of consumer goods to replenish the variable capital.
  4.  $II_s/q$  Accumulated as variable capital in Department II.
  5.  $II_s/r$  Unproductively consumed by Department II capitalists.
- (Again,  $p, q$  and  $r$  merely represent a further division of the surplus-value.)(3)

Workers and capitalists of Department I buy consumer goods from Department II to the total value of  $I_v + I_s/x$ . With this money, capitalists of Department II buy means of production from Department I in order to reconstitute their own constant capital used up during the production process. Capitalists of Department I can now replenish their own means of production through the circulation of  $c$  within their own department, and hire additional workers, who will buy additional consumer goods (equivalent to  $I_s/y$ ) from Department II. The capitalists of Department II thereby acquire the purchasing power to buy from Department I additional means of production necessary for their own expanded reproduction ( $II_s/z = \text{additional } II_c$ ), while the sale of consumer goods to workers and capitalists within Department II on the one hand, immediately reconstitutes its variable capital fund ( $II_v$ ), and on the other, realises a portion of the surplus-value ( $II_s/q$ ) which forms additional  $II_v$ . Finally, with the further means obtained by the sale of additional  $II_c$  to Department II, the capitalists of Department I can complete their own expanded reproduction, mediating the sale of additional  $I_c (= I_s/p)$  within their department (as well as the purchase of the equivalent of additional  $I_v$  from Department II, if this has not been covered in the first stage of circulation).(4)

Now let us turn to one of Marx's own examples of balanced reproduction from the work cited earlier. Marx posits the following value composition for social production(5):

$$\begin{array}{rcl} \text{I } 4,000c + 1,000v + 1,000s = 6,000 & \} & \\ \text{II } 1,500c + 750v + 750s = 3,000 & \} & \text{Total} = 9,000 \end{array}$$

Marx assumes that half of the surplus-value of Department I is to be accumulated, and thus, assuming the same technical composition of capital, 400 of the 500 $I_s$  ( $1000/2$ ), will go to additional constant and

100 to additional variable capital. Now that leaves 500Is plus 1000Iv to be exchanged for 1500IIc. This is a mere matter of simple reproduction in Department II. The 400Is to be capitalized circulates within Department I, yielding the following:

$$I \ 4,400c + 1,000v(\text{in money}) + 100s(\text{to be converted to } 100v)$$

Department II buys the 100Is as additional constant capital, and Department I adds this to its variable capital 'fund'. Department II now has 1,600c and so, assuming the same technical composition of capital, requires an extra 50v to restart the production process. This is taken from Department II's surplus-value, as were the purchasing commodities for the 100Is. Hence, of the 750IIs there remains 600, which forms a consumption fund for the capitalists of Department II. The value composition of Department II now stands as follows:

$$II \ 1,600c + 800v + 600 \text{ (consumption fund)} = 3,000$$

Department I now has this composition:

$$\begin{aligned} I \ 4,400c + 1,100v \text{ (in money)} \\ + 500 \text{ (consumption fund from reproduction of } 1,500IIc) \\ = 6,000 \end{aligned}$$

In the beginning the value composition of capital was:

$$\begin{aligned} I \ 4,000c + 1,000v &= 5,000 \\ II \ 1,500c + 750v &= 2,250 \end{aligned} \quad \left. \vphantom{\begin{aligned} I \ 4,000c + 1,000v &= 5,000 \\ II \ 1,500c + 750v &= 2,250 \end{aligned}} \right\} = 7,250$$

It is now:

$$\begin{aligned} I \ 4,400c + 1,100v &= 5,500 \\ II \ 1,600c + 800v &= 2,400 \end{aligned} \quad \left. \vphantom{\begin{aligned} I \ 4,400c + 1,100v &= 5,500 \\ II \ 1,600c + 800v &= 2,400 \end{aligned}} \right\} = 7,900$$

If production now takes place, the value composition of the total social capital at the end of the second year will be:

$$\begin{aligned} I \ 4,400c + 1,100v + 1,100s &= 6,600 \\ II \ 1,600c + 800v + 800s &= 3,200 \end{aligned} \quad \left. \vphantom{\begin{aligned} I \ 4,400c + 1,100v + 1,100s &= 6,600 \\ II \ 1,600c + 800v + 800s &= 3,200 \end{aligned}} \right\} = 9,800$$

Again, 1,100Iv + Is/2 (=550) exchange for IIc. But now 1,100Iv + 550Is is greater than 1,600IIc so the extra 50IIc must come out of the surplus-value of Department II, leaving 750IIs. This exchange reproduces 1,100Iv plus a consumption 'fund' of 550 in Department I. The other half of Is is capitalized in the ratio of 4c:1v. Hence, 4,400Ic is simply reproduced and, according to the internal circulation of Department I, an additional

440c is annexed to it, and 110Is remains (yet to be realized) to buy extra variable capital. Department I now has the following value composition:

$$(4,400c + 440c) + (1,100v \text{ [in money]} + 110v \text{ [to be realized]}) \\ \Rightarrow 4,840c + 1,210v = 6,050$$

In Department II an extra 25v must be advanced in respect of the extra 50c it received from Department I, and this must come out of the 750s leaving 725s. Now, to realize the extra 110s which Department I needs to expand its variable capital, Department II must add this 110 to its constant capital, yielding 1760IIc. This 110 must come out of the remaining 725IIs, leaving 615IIs. But this new constant capital requires additional variable capital, to the tune of 55. This also must come out of the surplus-value of Department II, leaving 560s to be added to the capitalists' consumption fund here. There is a remaining surplus-value of 550 to be added to the consumption fund of Department I capitalists. At the end of the second year we get the following composition of capital:

$$\begin{array}{l} \text{I } 4,840c + 1,210v = 6,050 \\ \text{II } 1,760c + 880v = 2,640 \end{array} \left. \vphantom{\begin{array}{l} \text{I } 4,840c + 1,210v = 6,050 \\ \text{II } 1,760c + 880v = 2,640 \end{array}} \right\} = 8,690 \text{ (compare 7,900)}$$

Now a third year of production:

$$\begin{array}{l} \text{I } 4,840c + 1,210v + 1,210s = 7,260 \\ \text{II } 1,760c + 880v + 880s = 3,520 \end{array} \left. \vphantom{\begin{array}{l} \text{I } 4,840c + 1,210v + 1,210s = 7,260 \\ \text{II } 1,760c + 880v + 880s = 3,520 \end{array}} \right\} = 10,780 \text{ (compare 9,800)}$$

1,210Iv + Is/2 (=605) must be transformed into IIc which means the latter must equal 1815. Again, the extra 55IIc comes out of the 880IIs, leaving 825IIs. If Department I expands with a ratio of 4c:1v then Department II must also capitalize the equivalent of (the future) 121Iv --> 121IIc. This comes out of IIs leaving 704IIs. The other (existing) 484Is circulates within Department I. Department II must complement its additional constant capital with (27.5 + 60.5 = 88)v, and this must come from IIs, leaving 616IIs. The annual declaration is:

$$\begin{array}{l} \text{I } (4,840 + 484 = 5,324)c + (1,210 + 121 = 1331)v = 6,655 \\ \text{II } (1,760 + 55 + 121 = 1936)c + (880 + 88 = 968)v = 2,904 \end{array}$$

The total social value at the end of the third year is 9559; at the end of the fourth year 11,858; at the end of the fifth year 13,043, and so on (fractions rounded off). After five years the total social capital would have expanded from 7,250 to 11,566, or 60%. The question now is

what clues can this schema of reproduction give us as to why growth cannot, in reality, be smoothly maintained?

#### 4.2 INTRANSIGENT FLAWS IN THE SCHEMA

Crises in the capitalist system are transient and therefore so are their causes. But the causes of specific crises reveal themselves as such only after the fact, as it were. At other times the tendencies which lead momentarily to crisis are still at work within the system, and thus crises are no less inevitable for their transient nature. The tendencies which ultimately become causes of crisis resolve themselves into the basic laws of capitalist production: the law of value, the equilization of the rate of profit, the rising organic composition of capital and the tendency of the rate of profit to fall. The schema of reproduction which Marx presents highlights certain mechanisms which mediate their transformation into capitalist crises. In this section I deal with these. They are: disproportionality, overaccumulation and underconsumption.

##### 4.2.1 Disproportionality: The Interdepartment Value and Use-Value Structure

Marx's reproduction schema demonstrates that capitalist reproduction is possible within limits, given a certain value and use-value structure between the two departments. We have seen a particular example of proportionality. Proportionality means that the imperative I mentioned before is met:

$$Iv + Is/x + Is/y = IIc + IIs/z$$

These are the only value categories we are interested in for the moment.

The use-value structure of social production must also be proportionate. That is, the commodities produced in each department over and above the needs of simple reproduction must be needed in the other. Exchange between the two departments is conceptualized as the dual flow of value in one direction and money in the other (it is not barter). Marx does not abstract from time, and thus exchange between the two departments is a dynamic interchange of money and commodity values. Should one purchase fail to take place, or one sale be incomplete, the flow of money and commodities is interrupted and the reproductive dynamic breaks down. However, if the right use-values are produced in the right quantities there is no reason why this should happen. So what are the laws governing what is produced and in what quantity?

The proportions which apply between the departments are governed by the law of value. As already demonstrated the operation of the law of value tends to equalize the selling price of particular commodities, or make them sell on average at value. The resulting competition between firms tends to lower the rate of profit in that branch of industry unless one of several conditions apply. One example is the extension of the need for a certain commodity or an increase in social demand. However, this condition in itself merely implies that this branch of industry will become relatively more profitable, hence capital will flow into it re-establishing the general rate of profit across branches. Otherwise, capital will flow out of this branch as production overtakes social demand, competition for surplus-value intensifies, the organic composition of capital rises and the rate of profit falls. Neither can monopolies escape this law, although they can be subject to it at the expense of other individual capitals. Eventually, they too must allow capital out of the sector as supply overtakes demand. The law of value thus distributes capital in a department in response to the final requirements of the other department. However, this is an imperfect response.

Capital flows into the most profitable branches of production, and this is both cause and effect of the tendency of the rate of profit to equalize. That capital is in perpetual motion testifies to the fact that the equalization process is never complete but always partial and self-negating. The emergence of monopolies exaggerates this situation as they absolutely lower the rate of profit in spheres where capital is fluid, and so relatively large movements of capital can be set off by the smallest hint of more profit. Monopolies themselves are freed from the rat-race of profit-scavenging between spheres of production, but their problem becomes one of judging the reinvestment rate in accordance with next year's social demand. They are more fortunate in this as, controlling the whole line of production, they may produce to order. But this too has limits, as the firms to whom they sell in the other department are, like those of their own department, unsure of the demand structure which will prevail in the coming year. Moreover, like any other firm, a monopoly may be undersupplied in means of production unless it pre-orders its productive commodities which, a priori (before the working of the law of value), is equally difficult to judge. The law of value asserts itself only post festum.(6)

Hence, proportionality, like general equilibrium, is only a tendency and never a permanent reality. Moreover, precisely because the tendency operates in the context of the law of value, equalization of the rate of profit and competition, it too is a self-negating or perpetual trend. The capitalist mode of production is in an almost constant state of disproportionality. The correct proportions between the departments are achieved only accidentally. If this disproportionality becomes too pronounced, then there will be a breakdown in money and commodity flows and a general cessation or limitation of the scale of reproduction rather than the normal situation of localized, intermittent contractions (and expansions) in given sectors and firms, and general continuance of expanded reproduction.

#### 4.2.2 Relative Over-Production and Inter-Industry Value and Use-Value Structures

Just as the proportions between departments must be maintained, the flow of value within each department must be roughly maintained, and this depends ultimately on the quality or type of commodity in which each portion of the social value is contained. Absolute over-production can occur only in the context of simple reproduction. Where expanded reproduction has grown up, too much is never enough provided the overall or selected sectoral expansion can absorb it. Thus, the expansion of one industry is over-extended only if the expansion of other sectors (effectively producing purchasing commodities) falls behind. This is relative over-production.

Relative over-production is a characteristic feature of the capitalist economy, whereas in pre-capitalist and post-capitalist modes of production it is seldom a problem, dogged as they are by crises of under-production. Capitalism is marked by over-production because of the consistent logical tendency toward maximum accumulation and thus economic prosperity at the level of the individual firm. Growth requires expansion; expansion can be achieved only through the realisation of increasing masses of surplus-value; progressive realization requires rising effective demand in the purchasing sectors of that specific commodity. The conditions of expansion are exactly the same in the purchasing sector. Thus, unchecked growth, if it is to occur, must equate with balanced growth. Four circumstances modify this course of development.



1. Uneven development. We have already seen that uneven development is an inherent law of capitalism. Capital (which is to say, the leading capitals) thrives on the underdevelopment of other firms, sectors, regions and countries. It is the very same trend toward maximum accumulation which moves capital to appropriate the surplus-value produced in other spheres. Each capital 'knows' that if it does not maximise its profits the result will be, not general balanced growth, but its own underdevelopment. Hence, the very same tendency which moves it to accumulate precludes the possibility of balanced development and signals the inevitability of over-production.
2. Competition. Competition excites capital into a frenzy of accumulation, with the bad effects mentioned in 1. It also forces capital into the most profitable sectors, and just as this is an imperfect distributor of capital between departments, so it is within one department. In effect, competition is a response to changing value and use-value structures, themselves modified by the movements of capital, and a result of their modification, i.e., through the competitive search for more profitable spheres of investment.
3. Money hoarding. Money is not hoarded accidentally. One instance in which money is hoarded is in reserve for the purchase of new fixed capital which may be required only after some years. This signals a permanent, relative over-production in Department I broken only by frenzied retooling, which generally occurs simultaneously in competitive sectors every seven to ten years(7), at which time there is conversely undersupply. A second case of money hoarding is where capitalists store value in currency or precious objects when productive investment is uncertain. The third case is a special case: where workers save for an expensive commodity, or when they imagine they are saving to start in business themselves, their money is temporarily turned away from consumption. Their savings generally remain in circulation through the mediation of banks and finance institutions. This money, however, has made its way back to capital without the mediation of the sale of a commodity, and thus the new cycle of production begins on a false (i.e., not in accordance with the general formula of capital) basis which cannot be maintained without the eventual sale of the commodity. These circumstances usually occur only periodically, and not generally.

4. The ultimate poverty of the working class. This subject is treated in the next sub-section.

Over-production is closely articulated with disproportionality. Over-production between departments - that is, say, the production of too many means of production or enough of one sort and too many of another - is disproportionality. Under these conditions there will be an oversupply, unrealized product and hence a break down in the money flow at the next stage of the dynamic. But, characteristically, a crisis will break out in one department, causing disproportionality and disruption in the expansion of the other department. I will briefly elaborate on this:-

Department I: If Department I produces too many or the wrong sort of means of production of means of production, some will remain unsold. The sub-department that produces these will contract, lowering the sub-departmental wage and forcing capital into other sectors. Increased competition will stimulate demand for new means of production and means of producing these. The inability of the contracted department to supply these will mean a disproportion of undersupply of Department I products. If accompanied by an anticipatory expansion of the wage-good sector, this will mean that total wages will be well below total prices of production, and Department II will contract. Meanwhile, Department I will have prepared for a production drive which is no longer viable, so it will suffer over-capacity and idle means of production. The sub-department supplying them will have a fall-off in orders and contract again.

Department II: If Department II accumulates rapidly, its consumer goods will overshoot total available buying power, especially if its expansion only 'fore-shadowed' an expansion in Department I, for the total wages in Department I will expand more slowly than the aggregate wage-income; which will therefore be expanding more slowly than the total value of consumer goods. Department II will thus contract as the expansion of Department I gets under way, and the latter will be hit with defaulted debts, or an undersupply of money from Department II. Existing consumer goods will partially devalorize, and the workers will buy cheap means of subsistence, allowing the possibility of diversification in Department II. Orders placed with Department I will be for new sorts of means of production, and so those sub-departments producing these will expand. This expansion will be small because the orders will be from, and to, only a small percentage of firms in each department. With Department I expanding and Department II contracting, the contraction of aggregate

income will continue and diversification will maintain growth only in a small percentage of selected firms.

Thus, over-production in one department - or in one of its key sectors, then spreading throughout the department - will cause contraction and then effective over-production in the other department. Contractions in growth will cause contractions in money-flows at the same time as contraction in the volume of commodity movements, spreading contraction throughout the economy. This will mean diminution of the aggregate wage, causing general relative emiseration of the working class and absolute impoverishment of selected groups. Leading capitals will dis-invest in flagging sectors.

However, relative over-production at a certain (low) level does have good effects for the capitalist economy. Because of the post festum nature of the law of value, the value and use-value structure of social want is only tendentially met by the value and use-value structure of social production. This implies there is always either a short-fall or over-production. Successive short-falls would in fact be tantamount to contracted reproduction, whereas capitalist reproduction must on average be expanded reproduction. The objective mechanism by which contracted reproduction is avoided, and the ground prepared for expanded reproduction, is average, net, relative over-production in all departments. From the point of view of social labour, this is a very wasteful mechanism, but from the point of view of capitalist reproduction on a social scale it is the best (least wasteful) mechanism for achieving capitalist expansion in a capitalist environment. From the point of view of monopolies, it puts the burden on other sectors. Individual competitive firms which cannot easily regulate production or preservation of commodity stocks (technically, physically or in the face of continuing competition), see it as an inexplicable evil to be pondered whilst awaiting an upturn.

#### 4.2.3 The Two Sides of Over-Production

##### 4.2.3.1 Underconsumption: Problems of Realization of Surplus-Value in Department II

In Section 2.1 we were interested in the value components  $I_v$ ,  $I_s/x$ ,  $I_s/y$  and  $II_s/z$ . In Section 2.2 we looked at their articulation with the movements of  $I_c$ ,  $I_s/p$ ,  $II_v$ ,  $II_s/q$  and  $II_s/r$ . The first set of values circulate between departments, the second do not. In this section we are

interested in one value component from each set. They are  $IIs/z$  (accumulated in the form of constant capital) and  $IIs/q$  (accumulated in the form of variable capital). Together these make up the surplus-value of Department II which is to be realized in other than Department II capitalist consumption. (Department II capitalist consumption, remember, was represented as  $IIs/r$ .)

Disproportionality in general can arise because of the 'anarchy of production' - that is, the unco-ordinated investment and disinvestment of capital for whatever reasons - and the resulting unbalanced value structure between departments. Overproduction is quite distinct as it has another necessary premise: the drive to accumulate. Underconsumption is a special case of overproduction which results, where commodities must be sold at value, in the inability of Department II to fully realize its surplus-value. Like relative overproduction generally, this follows, not from the anarchy of production, but from the contradiction between social production and private accumulation.

In volume three of Capital Marx writes: "The ultimate reason for all real crises remains the poverty and restricted consumption of the masses as opposed to the drive of capitalist production to develop the productive forces as though only the absolute consuming power of society constituted their limit."(8) The validity of this proposition is not immediately clear from the schema of reproduction Marx himself presents. The example we looked at had the following value composition in the second year:

$$\begin{array}{l} \text{I } 4,400c + 1,100v + 1,100s = 6,600 \\ \text{II } 1,600c + 800v + 800s = 3,200 \end{array}$$

From the point of view of Department II, realization had the following six steps:

1.  $800IIv$  replenishes itself
2. By selling commodities to the workers and capitalists of Department I ( $1,100Iv + 1,100s/2 [= 550]$ ) Department II obtains enough money to replace its 1,600 means of production and must buy an extra 50 means of production to maintain proportionality. This 50 is the first of the surplus-value to be realized.
3. 25 variable capital must be added to this - which requires a potential sale of commodities  $25IIs$  to future workers of Department II.

4. Department II buys an additional 110 means of production. This 110 goes in money to Department I, which pays it to additional workers - hence we require a potential sale to the additional workers of Department I of 110IIIs.
5. 55 variable capital must be added to this - which requires a potential sale of commodities 55IIIs to future workers of Department II.
6. This leaves 560IIIs unrealized, and this must be consumed by the capitalists of Department II.

Provided these proportions are roughly maintained, or deviations from them cancel each other, Department II will in fact be able to realize its surplus-value. Now the surplus-value of Department II goes toward additional constant and variable capital, and capitalists' consumption. We disregard the last named portion - capitalists' consumption - because it affects exchange neither between classes nor between departments. The variable capital will replenish itself with the interim aid of a capitalist reserve fund, merchant's account or bank credit, as per 3. and 5. above. Therefore, the demand generated in Department I must grow at the same rate as the rate of capitalization in Department II. This is the case in the schema: both grow at a rate of 10%. However, if we introduce a rising organic composition of capital ("...drive of capitalist production to develop the productive forces...") the demand for wage-goods generated in Department I will grow more slowly than its constant capital. Hence, to avoid underconsumption the constant capital of Department II must grow more slowly than that of Department I. There is, of course, no ultimate reason why this should be the case. In fact, we have seen a tendency toward disproportionality, which must also be a tendency toward (periodic) underconsumption.

The important part of Marx's proposition above is the "opposition" he postulates between the expansion of productive forces and the consuming power of the workers. It is only under conditions of the unlimited drive to accumulate (which is an established requisite in the face of competition and the falling rate of profit) that the purchasing power of the working-class becomes inadequate to realize the surplus-value of Department II. Notice that monopolies which by definition escape both competition and the falling rate of profit to a greater or lesser extent, are able to cheat underconsumption by regulating production.

Now we must ask after the role of underconsumption in crises. One of the most famous works on the topic is Rosa Luxemburg's book, The Accumulation of Capital.(9) Luxemburg asks how capital can expand and find new customers when the whole of the purchasing power of the working class ( $v$ ) must necessarily be less than the value of the total commodity package ( $v + s$ ), and when the capitalist class cannot enrich itself one iota by its internal exchanges. Luxemburg's answer is that non-capitalist social classes (peasants, non-capitalist landowners, etc.) must be drawn into the capitalist market, and thus transfer value into the capitalist system, to its ruling class:

The surplus value must therefore shed its form as surplus product before it can reassume it for the purposes of accumulation; by some means or other it must first pass through the money stage. So the surplus product of departments I and II must be bought - by whom? On the above showing, there will have to be an effective demand outside I and II, mere to realize the surplus value of the two departments, just so the surplus value can be turned into cash.(10)

Her ultimate conclusion must be that as soon as all areas of the world and all its population were drawn into capitalist relations of production, capitalism would cease to expand and thus necessarily collapse.

The point to notice about Luxemburg's argument is that it abstracts from competition by treating the capitalist class as homogeneous. Luxemburg does not conceive of the total capital as many capitals competing, but as 'one capital'. For some purposes it is useful to make analyses at this level, but for analyzing underconsumption it is not, for, if capital were in fact 'one capital' rather than many in competition, underconsumption would not be conceivable as a necessary aspect of capitalism as the drive to accumulate could be effectively regulated, as a monopoly does in a limited way. Hence, it is true, capital might cease to expand and thus 'collapse' by definition, but this would tell us little about the real course of events. Bukharin was correct to say that "Rosa Luxemburg's basic mistake is that she takes the total capitalist as the individual capitalist....Indeed, if the total capitalist is equated with the typical individual, the first of course cannot be his own consumer..."(11) Hence the need for a "third party" consumer demand.

Luxemburg seems to base her argument on the following model of reproduction:

$M - C(\text{labour-power} + \text{means of prod'}) \dots P \dots C' - M'$

It is clear on the basis of this model that the value of labour-power, which forms only a part of  $C$ , can never equal  $C'$  or the expanded value of the product. However, where competition prevails, each capital 'hopes' that the equivalent of its own workers plus someone else's workers will feed their wages back into the purchase of its commodities. This capital will realize its surplus-value while others complete this process only partially. Thus, development is uneven, as has already been explained, and only the leading capitals expand 'normally', while some go out of business altogether. This situation is typical of the capitalist mode of production even abstracting from the exploitation of non-capitalist sectors and social classes.

Rather than Luxemburg's theory of total collapse, underconsumption may contribute as a 'trigger' to intermittent capitalist crises. Since there is a constant tendency toward overproduction and disproportionality, the effects of underconsumption will hit all firms in Department II evenly only by accident. It is far more likely that selected sectors and firms will be hit, which, in the last analysis, is part of what competition means. These conjunctural fluctuations in consumption, departmental proportionality and levels of production are a normal, characteristic feature of capitalist development. In this sense, capitalism is always on the verge of crisis, or in a constant state of incipient crisis. The real crisis arises when disproportionality oversteps the allowable limits, due to massive overproduction. Such a crisis may be triggered by underconsumption concentrated in a particular key sector of Department II, as it was in the U.S. automobile industry at the onset of the 1974-75 recession.<sup>(12)</sup> Unsold finished goods retard the purchase of ancillary finished goods from other parts of the department, causing relative overproduction there. Then raw materials orders contract, and the production of means of production becomes uncertain. The slump in U.S. automobile sales in 1974 was accompanied by underconsumption in the construction industry.<sup>(13)</sup> Together the contraction of these two sectors affected other sectors in Department II to effect a disproportion of sufficient magnitude to be recognised as a real crisis.

The articulation of underconsumption with the partially autonomous phenomena of overproduction per se and disproportionality is important in determining the depth of the crisis. If, for example, the level of production is increasing at a disproportionate rate, capitalists in Department II may be persuaded to capitalise some of the surplus-value

which, for the balanced growth of the system, they ought to be consuming. If underconsumption is felt at this conjuncture it would be disastrous, since not only would the working class be underconsuming in particular sectors, but the rate at which goods were being produced would be increasing. If the sectors of underconsumption and excess production overlapped this would militate against a quick recovery and long-term disproportions (underdevelopment of certain sectors) would result.

#### 4.2.3.2 Over-Accumulation: Problems of Valorization of Capital in Both Departments

We saw in the last sub-section that problems of the realization of the surplus-value of Department II result from the "restricted consumption of the masses as opposed to the drive of capitalist production to develop the productive forces as though only the absolute consuming power of society constituted their limit." (14) As might be expected, it is this drive to accumulate which results in over-accumulation, but like over-production per se, over-accumulation is always relative. Specifically, over-accumulation is relative to the profitable level of physical output. If this does not expand in the same ratio as capital, over-accumulation may result. Therefore, over-accumulation is not premised solely on the drive to accumulate, for this posits no necessary relative reduction in the profitable level of output, but can result from the drive to accumulate only when its effects are mediated by problems of realization. The more proximate cause of over-accumulation, then, is underconsumption.

Underconsumption, however, only affects the realization of the surplus-value of Department II. It is clear, on the other hand, that over-accumulation can just as much effect Department I to the extent that the profitable level of physical output of producer goods declines relative to the rate of accumulation of capital. Now, strictly speaking, a lack of demand for producer goods is not underconsumption, for, unlike consumer goods, means of production are not consumed in the market (i.e., do not fall out of circulation through sale); they are rather consumed in the production process. Thus, the correct concept for describing a decline in demand for producer goods, which constitutes the immediate cause of over-accumulation of means of production in Department I (i.e., means of production of means of production) is the contraction of capital.



Finally, here, the reader will recall (Chpt 2, Section 2) that, for Marx, the production process falls both inside and outside of the circulation of capital. It presents this dual character because of the twofold nature of the commodity. On the side of its use-value commodity capital is consumed in production and thus falls out of circulation, and on the side of exchange-value commodity capital is conserved and expanded ( $C - C'$ ), and the capitalist attempts to realize this expanded value in a further act of exchange - sale. It thus remains in circulation. From the point of view of capital, consumption of commodity capital in the production process is not directly relevant to the realization of exchange-value, and has no necessary effect on the latter. It is rather a part of the process of the valorisation of capital through the transformation of the original commodity capital advanced (means of production and labour-power) into a new use-value with an expanded exchange-value. The 'underconsumption' of commodity capital is therefore relevant only to the process of devalorisation of capital, and not to the problems in realization, which are, for Department II underconsumption (properly so-called), and for Department I the contraction of capital. The concept which connects the 'underconsumption' of use-values in production with their devalorisation is under-utilization.

From the foregoing it is clear that over-accumulation in Department II may follow as a direct result of underconsumption. This over-accumulation may lead to the contraction of capital in Department II, which will mean a lack of demand for means of production, and thus over-accumulation will sooner or later be felt in Department I. However, just as it is tautological to say that underconsumption follows from a lack of effective monetary demand for consumer goods, so it is with the contraction of capital and the demand for producer goods. Beyond this we must recognise that development in both departments is uneven, that the specific capitals in which the lack of demand is felt will be those with below-average organic compositions of capital, and that the specific branches of industry in which it is felt will depend on the use-value structure of demand. Therefore, it is quite possible that over-accumulation will occur in certain sectors of Department I or the department as a whole without first becoming a reality within Department II. The relative contraction of capital in Department II (i.e., over-expansion of Department I) may precede a permutation of three consequences: 1) less surplus-value available for distribution in Department I, which will squeeze less efficient firms, 2) overproduction

of selected goods which will hit corresponding branches of industry, and 3) general overproduction, which will force the contraction of the department as a whole. Where Department I expands at a disproportionate rate, contraction may follow, causing unemployment and underconsumption of consumer goods. Thus, there is no necessity for real over-accumulation to spread from Department II to Department I; it may also originate in Department I and spread in the opposite direction.

Over-accumulation is fully realized where an increased mass of capital produces no more or even less profit than before its expansion. If this is cumulative over several cycles, an absolute contraction of capital may follow with a corresponding contraction in physical output. Such a contraction in production has a twofold significance. It means under-utilization of means of production and a corresponding reduction in the rate of worker-employment.

From the point of view of the individual firm, contraction means under-utilization of means of production. Capital accumulated up to the point of recession cannot now produce salable goods. In fact, for some time before a recession is felt, the means of production employed are producing unsalable goods, which, unrecognised and unchecked, contributes its part to bringing on the crisis. As the means of production now lie idle, or produce only intermittently, they are devalorising. That is, they may be physically depreciating through irregular use, age and other unproductive wear and tear; and they are morally depreciating insofar as they cannot now be valorised, i.e., transformed into new commodities with greater value. Different types of commodity capital will devalorise at different rates and for different time periods. Raw materials such as untreated timber when stored outdoors will devalorise permanently. Other more durable raw materials like stone, gravel, galvinised iron and wood indoors, etc., will revalue and be useful when production picks up. The general trend with machines is that, once production picks up, more efficient means of production are installed, and thus the old means of production suffer permanent moral depreciation and will never transmit the whole of their original value (price of production) to new commodities

It is well known, that at the same time as capital cannot be utilized, great hardships are imposed upon certain strata of the working class. The relative surplus working population which follows on the rising organic composition of capital and uneven development of regions and countries is

added to by the 'oversupply' of labour relative to the profitable level of utilization of productive capacity. Now, it is one thing to make a machine redundant, but quite another to make a person redundant. Not only is the worker made redundant as the worker of an individual firm, but he is made redundant in terms of social production, the essence of society, and thereby forfeits the fundamental element of social being. Therefore, the unemployed worker is, quite apart from being inherently unemployable, lowered by his forced redundancy to a level of existence in complete contradiction with the potential level of civilization that could in fact develop upon the current material base of society. To the degree he perceives this potential, he becomes politicized. And to the degree he finds no substitute for being an essential member of society, he becomes anti-social. In this way the crisis of social production is re-reflected in itself, and finds personal, political, moral, legal and spiritual expression, and no longer presents itself merely as a hitch in the realization of profits.

Moreover, social production has been developed into a great pyramid of material life on a planet that could not support a tenth of the number of people in its natural state. When this production is disrupted, more people will be forced below the subsistence standard of living, over and above, that is, the normal uneven development of the system. Over-accumulation is, therefore, never absolute over-capacity of the social means of producing, but entirely internal to the capitalist system, with its disproportions and relative overproduction, i.e., over-capacity of capital.

The logic of capital admits no standard such as human need. In 1972-74 there was a severe famine in the Sahel region of Africa, Bangladesh and parts of India and Pakistan. From 1963-78 world grain production rose 2.9% per year, while world population increased 1.9% per year.(15) Immediately prior to 1972, the U.S. government was propping up grain prices with artificial reductions in grain production. This conjuncture of course had effects which were at least unnecessarily severe, perhaps totally unnecessary, in the absolute sense. Not only social being, but material being is threatened by over-accumulation and its logical corollary, unemployment.

#### 4.3 TURNOVER OF CAPITAL, THE REALIZATION OF SURPLUS-VALUE AND THE STATE

Once a crisis is felt in Department II as reproduction 'with an undertone of stagnation'(16), this situation requires an active effort by each individual capital to mitigate it. Thus, competition intensifies. At this time the slow-down in the turnover of capital means, on the one hand, unsold stocks of finished commodities, and on the other, the growth of investment in stocks and bonds. Unsold commodity stocks halt the turnover of capital by firms and thus the normally expanded reproduction of the system. At the same time, money advanced for stocks and bonds stays in that form, since it has been taken out of direct circulation in anticipation of the reserve funds needed in the normal process of the turnover of capital (savings for expensive fixed-constant capital, bulk raw material and interim accounts including the wages of additional workers) which has now slowed right down. Thus, unsold commodity stocks mean the expansion of stock capital, including that held by financial institutions.

This stock capital earns interest, probably at a higher rate than the average rate of profit. This is because it is moved into industries where the rate of profit is still high, and these are consequently likely to be large industries which extract surplus-profits from their unevenly developed range of penetration (sectors, regions and countries). Leaving pure speculation out of consideration, capital is also moved to the public, primarily in the form of mortgages and hire-purchase. Thus, the leading capitals can make efforts to maintain growth through new ventures and new technology. The fluid finance capital asserts its advantage by following profits into whichever sector is producing them, and demand is generated artificially by credit.

The state is also the recipient of stock capital (internal and external borrowing), and it uses this in attempts to reduce both excess commodity stocks and credit, thus restoring the semblance of normality to the turnover of capital. This section is concerned with the mechanisms by which this is done.

##### 4.3.1 The Domestic Market and the Realization of Surplus-Value

In New Zealand the overwhelming proportion of private productive investment falls within Department II. This means that disproportionality has little effect internally, while at the same time the economy is

particularly susceptible to international overproduction of key finished goods and underconsumption of New Zealand-made goods domestically.

The problem 'at home' is to stimulate a certain quantity of demand for a certain quality of goods, i.e., New Zealand-made goods. This problem has been with successive governments, and so we have a complex set of trade barriers against the importation of finished goods, including import licencing and selective tariffs. Tariffs have always been preferred to sales tax, as the presence of foreign commodities on the New Zealand market might distribute underconsumption to the advantage of foreign exporters or give them parity both in substitutable goods and in areas where demand is elastic. The other side of this medal is that New Zealand capital as a whole cannot realize the surplus-value contained in its finished goods because of the lack of demand generated in a small Department I, and so it must export. In time of crisis, this puts the government in the contradictory position of arguing for free trade whilst necessarily maintaining tariff barriers. The state provides export incentives for innovative entrepreneurs, and subsidises established export industries. As the world crisis progresses, the supplementary minimum prices (S.M.P.s) offered by the government on agricultural overproduction have become more and more important. Effectively, the government has guaranteed the realization of surplus-value to parts of the farming sector with the (borrowed) stock capital which should be employing its potential final consumers, i.e., in the 'international Department I' which has contracted. The government thus depends on selling in countries outside the sphere of capitalist contraction - e.g., the oil-producing nations, Japan and Russia - or waiting for fluctuations in the market to reduce its losses. In the latter case the government loses out by buying dear from the farmer and selling cheap to the customer, yet it is still the same money which pays the farmer, but now in a borrowed rather than a privately earned form. This also puts considerable pressure on the state to develop marketing strategies, and this too has happened, especially in the agricultural and horticultural sectors and the manufacturing sectors which export their derivatives, e.g., carpets and wine.(17)

The government has now taken further steps to avoid underconsumption on the domestic market. Like most New Zealand governments, it has allocated public works selectively by area - to be carried out by selected firms. This is to generate demand from the workers of Department

I. Recently, however, there have been moves to generate a Department I under the rubric of 'Think Big'. This strategy actually predates the 'Think Big' energy projects with the erection of hydro-electric power stations and the southern aluminium smelter. The recent 'Think Big' projects are joint ventures between New Zealand and overseas capital. There are two reasons for this. First, not having a Department I, New Zealand capital is ill-equipped technologically and in terms of market access rights to produce the end commodity at a realistic price, which is to say, realize the surplus-value of its new Department I. Second, since the raison d'être of these ventures is to stimulate internal demand, it is of primary importance that wages are spent in New Zealand to return profit to existing industries. (Whether new profits are retained is only of secondary importance. Since there is no existing Department I, overseas and government capital in the new plants cannot be in competition with local capital.)

The recent agreement concluded with the Australian government, known as Closer Economic Relations (C.E.R.), also fits the pattern of expanding effective demand for New Zealand finished goods. C.E.R. will progressively 'free up' trade between Australia and New Zealand. This will result in the free movement of goods and capital between the two countries. In the long run it is hoped that the Australian market will absorb a greater quantity of New Zealand finished goods than vice versa. Thus, underconsumption will be allayed. This strategy, however, is much less sound than 'Think Big' from the New Zealand point of view. The flaws in the reasoning occur at three levels. Most generally, Australia's trade with the rest of the world is considerably more free than New Zealand's. This is possible because, with a bigger Department I and a level of technology in Department II closer to that of its trading partners, Australia is less susceptible to underconsumption. This means that cheaper Australian and other overseas goods will compete favourably with New Zealand goods on the combined market, setting up a productivity gradient and a drain of labour from New Zealand. Second, on the combined market there will probably be an equalization of the distribution of underconsumption, but this will be an equalization in value terms. So long as New Zealand produces a smaller number of commodities per unit value, Australian and other overseas commodities will always be preferred. Thus, underconsumption in value terms may be replaced by overproduction within the prevailing use-value structure. Thirdly, Australia's higher technological base will mean that its currency will

continue to dominate that of New Zealand. As Australian currency grows relatively stronger, the first points mentioned will be exacerbated because of the relatively unrestricted transfer of value and commodities between the countries. The link to Australia would thus also put New Zealand in a worse position in its trading relations with other countries from which it purchases means of production. New Zealand may then have to overvalue its dollar further (especially in the face of trade deficits) to maintain and upgrade its quantity of means of production. This would require borrowing but would not be inflationary. If the balance of payments deficit grew too large, however, massive devaluations may be required, and these would be hyper-inflationary. At the same point the pressure to overvalue currency occurs, Australian capital exporters, foreign capital invested in 'Think Big' and potential overseas investors, would be exerting pressure for devaluation to bring investment costs in line with labour-productivity relative to other countries or areas of the world. This dual pressure would become irreconcilable if the crisis deepened sufficiently.

As the crisis progresses, finance capital, landowning capital, and their articulation, become a less and less tolerated drain on the capitalist productive system, and are not left unregulated. Between 1974 and 1981, it was more profitable to invest in mortgage finance than to invest productively.(18) Within that period the government transformed the State Advances Commission into the semi-autonomous Housing Corporation in an attempt to restrict mortgage advances through competition. However, the Housing Corporation has never drawn funds from private individuals. As recently as November, 1983, the minister of housing, T. Friedlander, announced that the housing corporation would not start borrowing from the public as it was not the role of government to compete with the private sector.(19) One can only conclude that such competition is permitted only where it does not restrict consumer demand. Also in November 1983, interest rates on mortgage finance came under direct regulation by the government. Such a move cuts the profits to the lender and redistributes them to the house-buyer. More buyers will thus be found, which will support the housing industry and maintain consumer demand further through its workers. Lower repayment rates will have favourable effects on interim consumer demand. On the other hand, lenders will be more inclined to invest productively; thus, the ratio of profit taken to value created will shrink, meaning better results for productive investment.

Land-owning capital has also come under regulation, in the first place through the 1982-83 wage/price regulations, which will be extended in a modified form. Property rents are consumed neither by tenant nor landlord, nor are they invested productively. They go to local bodies, finance institutions, and, more often than not, they are accumulated within the landowning class in further existing properties. By regulating rents, the government releases consumer power that would otherwise have been tied up in money hoards for the purchase of additional existing properties, but it decreases the investment potential of rental properties, thus discouraging capital from entering and being trapped in this sector anew.

By lowering interest rates generally, the government hopes to draw money out of hoarding and 'closed' sectors into consumption. This will, it is hoped, increase profit rates, restoring business confidence and leading to 'real' productive investment, as opposed to 'credit-supported' investment, which will reproduce consumer demand and thus lead an upturn. However, when we look at New Zealand's articulation with the world capitalist economy, and its structure, this scenario loses plausibility.

#### 4.3.2 The Structure of the Capitalist World Market

The fact that New Zealand capital is applied overwhelmingly in Department II means that underconsumption is an ever-present threat. We have seen some of the internal measures the state has taken to maintain consumption, but in the last analysis that consumption corresponds mostly to the variable capital component of the product value. The realization of the surplus-value of Department II (i.e., of New Zealand) depends on the demand generated in Department I, and that means the consumption of our finished-good exports in other countries. It follows that while disproportionality is of negligible importance internally, the New Zealand economy is dominated by it internationally. Expansion or contraction in New Zealand is determined by specific conjunctures of expansion and contraction in the economies of its more industrialized trading partners.

As I mentioned, the 1974-75 recession was triggered by underconsumption in the U.S. automobile and construction industries. The slump in these sectors merely revealed what had been happening under the surface of the capitalist economy - overproduction and general decline in the rate of profit - from the 1967-70 period. As Department II



contracted, Department I quickly felt the effects of its own relative overproduction.

"It [the recession] then spread to textiles, electrical appliances and building materials (glass, cement, bricks), and finally hit petro-chemicals. The steel industry was still suffering shortages throughout the [Northern] summer of 1974; then this branch was hit by the full force of the recession. The same is true of the wood and furniture industry.

"On the other hand, in the sectors of machine-tools, coal, oil, and cereals, supply continued to lag behind demand through the first phase of the recession. Sugar, however, suffered a spectacular downturn (a 30% fall in price in the space of several weeks). Oil sales diminished in volume. Orders in telecommunications, which had been thought to be undergoing indefinite and constant expansion, were on the decline both in Europe and Japan."(20)

In New Zealand the decline in real profitability (adjusted to C.P.I.), which began at least as early as the beginning of 1973, was, for the first time recognised by the business world as a decline in book earning rates in 1974.(21) Overproduction and disproportionality in other capitalist national economies forced contraction there, and this left little consumer demand for New Zealand products. This was felt as underconsumption in the New Zealand economy and caused contraction here. The contraction of the New Zealand economy, and those of other similar countries, fed back into the world capitalist economy, causing truly international disproportions (contraction of orders for means of production). This made the recession a generalized (world) capitalist recession.

Thus, from the period of the 1974-75 recession two related government strategies became especially important. The first was to stimulate domestic demand by the means discussed in the last sub-section, and this has developed even into the transfer of the profits of strictly non-capitalist social classes (landowners) into the working class. The second emphasis was on the marketing of New Zealand products especially in countries which, while not traditional trading partners, were relatively untouched by the recession (e.g., Russia), or at least realizing a good proportion of their own surplus-value (e.g., the O.P.E.C. countries) or part of someone else's (e.g., Japan). In all these places New Zealand was in competition with imperialist and other neo-colonial countries. The intensity of this competition is expressed, for example, in the fact that the government recently stopped foreign fishing in New Zealand's coastal waters and is prepared to back this restriction with force in order that countries like Japan, Russia and South Korea might have a short-fall in food supply and buy New Zealand agricultural products or even fish. The

other half of the marketing strategy is to produce for demand, which requires international market research. This needs government funding and thus closer co-operation between the government and export manufacturers. It has two parts. First, labour-productivity is encouraged to cheapen New Zealand goods and get as big a share of new market-niches as possible. This applies mainly to new lines of production but also plays a part in the rehabilitation of established branches of production, especially agriculture. More importantly, however, is the "restructuring" of industry (adaptation of the use-value structure of production) in response to market information.

Conversely, the country's commitment to agricultural production is expressed as a maintenance of the scale of production (although there have been unregulated moves to replace pasture with forestry in some places, e.g., Northland, Wairarapa), and an increased emphasis on cost-cutting in this sphere. This increase in the organic composition of farming capital does not mean less purchasing power in the framework of family production, and may, indeed, even increase the productive activity in ancillary Department I and service sectors. Lower national prices of production in the family-farming sector are a positive advantage to the government. The government guarantees the surplus-value of farmers; it thus buys dear and sells cheap in times of international overproduction. The difference is a cost which, by definition, is not passed on to the final consumer. Hence, the lower the price of production, the smaller the government's loss. Furthermore, if the government were to set a level of 'sustainable loss', the lower the national price of production the further the government can trade at below the value of the product and thus more capital completes the circuit, trade relations become more secure and the storage problem at home is eased.

Since New Zealand must import means of production, it was traditionally accepted that the dollar should be over-valued to allow imports, and the 'bill' was picked up by borrowing.(22) However, between 1973-74 and 1974-75, international underconsumption coupled with unresponsive importation patterns raised New Zealand's balance-of-trade deficit (visible excess of imports) from \$274 million to \$1,180 million. The following contraction of industry coupled with the search for new markets steadily lowered this figure until, in 1978-79, there was a visible excess of imports of \$145 million. In line with what I have said, trade with Britain was (still) shrinking in 1974, and this was followed

by a reduction in trade with Australia in 1975. Countries other than New Zealand's main trading partners (U.S., U.K., Japan and Australia) accounted for an increasing proportion of trade, especially exports.(23) The contraction of industry and the consequent problem of over-accumulation then evoked the government marketing strategies.

A trade surplus should allow New Zealand firms to update their technology and thus at least to present the appearance of a new round of accumulation. However, business confidence has stayed realistically low in the 1980s, and employers see two related disincentives to investment. First, according to the New Zealand Employers Federation(24), wages are too high, and secondly, inflation and interest rates are too high:-

In 1973-74, the operating profits percentage return on total assets exceeded mortgage interest rates by 20% and more. Since then, return on assets (at book value) has sunk to less than 80% of new mortgage rates - and if assets were stated in the debased currency value of 1981 it would be even less.(25)

The government is also now coming under pressure from New Zealand's trading partners either to open up the New Zealand market(26) or to buy a greater volume of imports. The latter action is to be preferred in the form of purchase of means of production.

However, before this will happen, lower wages and lower inflation and interest rates are necessary to trigger expansion and to boost confidence, i.e., stimulate investment. Several government moves may be seen in this light. First, the wage/price regulation attempts to reverse the debasement of profits through inflation, and transform inflationary tendencies into debasement of wages. That is, by holding wages constant and at the same time allowing prices to rise marginally (i.e., to an extent which allows the maintenance of rates of profit, all things remaining equal), the real wage of the worker falls. This is no solution in itself, but if it is coupled with the expansion of credit and the advent of 'Think Big', then the absolute level of employment may increase marginally producing simultaneously with the reduction in wages an expansion of consumer-demand. To continue the trend of debasement of wages, regulations have been implemented to significantly weaken unions by making them voluntary, and changes in the state pay-fixing procedure began in November of 1983, so that private-sector wages may either follow public-sector wages down, or at least not be supported by the latter. Second, the average expected or existing profit must climb above the rate of interest. The government announced in November 1983 that interest rates would come under direct regulation and thus remain "low". The level

at which they were set will engender partial disinvestment by lenders, and further moves can be expected on this front.

The 'trigger' to national recovery is, by definition, unpredictable. A major oil-find in coastal waters may well set off a new round of investment; an upturn in key sectors and countries of the world economy might serve, as might massive government borrowing, as in Brazil and Chile in the 1970s. However, unless the trigger to recovery is in fact the real recovery of the world capitalist economy, no upturn can be other than short term, as the second, third and fourth rounds of accumulation cannot occur without massive government support. If such a bubble should burst, as happened in Argentina in 1982-83, massive devaluations would follow with galloping inflation. Overseas borrowing sources would dry up, capital would go out of the country or into safe depositories (e.g., precious objects). The emphasis would thus return to trade policy, as the same old problems reasserted themselves. The biggest threat to New Zealand capitalism under these conditions would be the organization of the new industrial proletariat currently being prepared in the government's conscious development of a Department I, in the form of big-scale projects.

Thus, economic recovery in New Zealand cannot be achieved independently of the generation of consumer-demand in Department I internationally. This is not to suggest that within the limits of the recession there cannot be better and worse policies. On the contrary, the better policy for 'the nation' will be the one that acknowledges the limits which the recession in the world capitalist economy places on economic behavior and material life, and prepares, not for miracles in the downturn, but either to make the most of the upturn when it comes or to withdraw from the capitalist system.

## NOTES TO CHAPTER IV

1. This is nothing, of course, compared with the paradox that nuclear weapons are socially useful because they realize their price of production on the market. I believe this indicates a contradiction in capitalism rather than in the labour theory of value.

2. This equation is also presented by Ernest Mandel. See his 'Introduction' In Marx, K (1978) Capital Vol.II. Hammondsworth, Penguin. p.27.

3. The fractionation of surplus-value in these terms indicates that it goes into different 'funds' - one for variable capital, one for constant capital and one for capitalists' consumption. This is the case with the surplus-value of both departments. Hence:-

$$\begin{aligned} I_s/x + I_s/y + I_s/z &= I_s \\ II_s/p + II_s/q + II_s/r &= II_s \end{aligned}$$

4. For a similar description see Mandel's 'Introduction' In Marx, K (1978) op.cit. The purpose of this description, like the equation cited in 2. above is not to demonstrate anything new or original. However, in the exposition of Marx's reproduction schema, which is well known to most Marxists, it is useful to draw on Mandel as he is a writer with whom I am familiar.

5. Marx, K (1978) op.cit. p.586.

6. Post Festum: literally 'after the feast'. An expression sometimes used by Marx. The post festum assertion of the law of value is an idea which expresses the irrationality of capitalist production; that is, of the short-term orgy of accumulation which is indulged with total abandon, and which only later reveals bad effects given the goal of long-term expansion.

7. We will see the reasons for this in Chapter VII.

8. Marx, K (1977) Capital Vol.III. Moscow, Progress. p.484.

9. One of the biggest controversies surrounding Luxemburg's work is the question of whether or not she is in fact an 'underconsumptionist'. That is, whether, for her, underconsumption is the sole and final cause of capitalist crises. Ernest Mandel, who writes on Luxemburg under the heading of underconsumption theories Marxist Economic Theory. Vol.I. pp.361-63) defines underconsumptionism thus: "In order to explain periodical crises, the supporters of underconsumption theories start from the condition between the tendency to unlimited development of production and the tendency to limitation in consumption by the broad masses, a contradiction which is indeed characteristic of the capitalist mode of production." Mandel's definition of underconsumption is essentially the same as mine:- problems of the realization of the surplus-value of Department II.

But, M. Bleaney (Underconsumption Theories. p.144) points out that to avert the crises with which Luxemburg is concerned "...buyers of means of production will do just as well as buyers of consumption goods..." from which he deduces "...the non-underconsumptionist character of Rosa Luxemburg's ideas." Where does this leave us?

The theory of underconsumptionism here alluded to is clearly not Luxemburg's whole theory. Without going further into the question we can at best justify, what may be, a straw woman on analytic grounds - it will help us answer the question of the role of underconsumption in crisis. Whether the non-underconsumptionist portions of Luxemburg's theory mitigate the undoubted underconsumptionist parts, rendering the whole non-underconsumptionist in some sense is another question.

10. The Accumulation of Capital p.137.
11. Tarbuck, K (ed.) - R. Luxemburg and N. Bukharin: Imperialism and the Accumulation of Capital p.201
12. Mandel, E (1980) The Second Slump London, Verso. p.51.
13. Ibid. p.51.
14. Marx, K (1977) Capital Vol.III. Moscow, Progress. p.484.
15. Mandel, E (1980) op.cit. p.143.
16. This is one of Mandel's expressions. For references to 'Tonalities' see, for example Late Capitalism pp.130-32, 168, 180, 190, 442, 446, 459.
17. Tourism will also help satisfy the need for this demand, the only difference being, that instead of the product going out to the buyer, the buyer comes to the product. However, in the tourist line marketing is also necessary, and the government has provided this, with a notable increase in Japanese tourists to New Zealand in recent years.
18. P.A. Management Consultants Ltd: N.Z. Company Profitability 1972/73-1981 Auckland. p.21. (More recent figures unavailable)
19. T.V. 1 News November 2, 1983.
20. Mandel, E (1980) The Second Slump. op.cit. p.30.
21. P.A. Management Consultants Ltd. op.cit. pp.??
22. Excepting the fact that New Zealand must follow Australia in devaluation to retain its capital investment.
23. New Zealand Yearbook 1980 p.564.
24. See the argument of the New Zealand Employer's Federation in its Policies for Employment Discussion Paper No.1, Dec, 1980. And also McDonald, T.K. (then) Head of the Institute of Economic Research in his Wages and Profits; the policy issues New Zealand Institute of Economic Research, Oct., 1978.
25. P.A. Management Consultants Ltd. op.cit. p.20.
26. The government will open up the market for Australia - see The Press, Christchurch, November 10, 1983, import licencing to be phased out in favour of tariffs. This is to allow imports of Australian goods, but not other overseas goods coming through Australia.

## Chapter V

### THE PERIODICITY OF CRISES UNDER CAPITALISM

We now have the means of explaining capitalist crises as such. In the previous chapter we elaborated the crucial ideas of disproportionality, underconsumption and over-accumulation; and discussed their reciprocity with trends in the rate of profit. This explanation of the capitalist economy is based on the analysis of capital itself, and its basic unit - the commodity. Therefore, we came to the conclusion that capitalism is constantly in a state of incipient crisis. The trauma of the capitalist system of production is self-induced and inalienable.

This leads us to the next question. If crises are inevitable can we predict when they will occur? The answer to this question hardly requires an elaborate body of theory, for the regular periodicity of crises has been well documented for over 150 years. The regular cycles of relative prosperity and crisis are known as industrial cycles and are historically specific to the capitalist mode of production.

In this chapter I attempt to show that the explanation of crisis at which we have arrived is simultaneously an explanation of the industrial cycle. That is to say, since the explanation is based on the analysis of capital, the way that crises occur in the capitalist system in reality is the way we would expect them to occur. Besides this, two sources of variation in the frequency and amplitude of industrial cycles are discussed. These are the economic planning of big capital (Section 2), and the conscious policy of the state (Section 3), which are of particular importance under late capitalism.

#### 5.1 MARXIST THEORIES OF CYCLICAL CRISIS

To begin with we will look at three variants of the 'Marxist theory of cyclical crises'. The three variants are drawn from an essay by Thomas E. Weisskopf, and it is basically his account of them that is presented here.(1) To understand the theories we must understand the key role which Marxists generally attribute to the rate of profit in crises.

Capital is value in search of accretion. It follows that capital must be profitable. If money, productive commodities and labour-power cease to

yield a profit, they cease to act as capital. If the capitalist cannot realize a profit, he cannot expand production because he does not have the material means to do so; if he cannot realize a normal profit he will not expand production because, as capital personified, he seeks only profitable investment. Thus, a falling rate of profit provides both the objective and subjective conditions for a contraction of production and crisis under capitalism. On this understanding the following theories attempt to account for the genesis of periodic declines in the rate of profit which signal the onset of crisis. The three variants are: the theory of the rising organic composition of capital, underconsumption theory and the theory of the exhaustion of the reserve army of labour.

1. The rising organic composition of capital. This theory is predicated on changes in the conditions of production. It rests on two hypotheses: 1) the ratio of constant to variable capital will tend to rise, and 2) the rate of surplus-value will not change much. Given that  $s/v$  is constant, the ratio of profit to total company income remains constant within a firm. Rough conversion to price terms will look like this(2):

$$\frac{\text{Mass of Profit}}{\text{Company Output (or Income)}} = \frac{s}{s+v}$$

Now, taken together, the first and second hypotheses imply that the ratio of output (or income) to capital stock will tend to fall:-

$$\frac{\text{Output (or Income)}}{\text{Capital Stock}} = \frac{s+v}{c} = \frac{s/v + 1}{c/v}$$

Clearly, if  $s/v$  remains constant and  $c/v$ , the organic composition of capital, rises, the fraction will decline, indicating that output does not rise in the same proportion to capital stock. Since the mass of profit and company output are proportional, a diminution of output against total capital denotes a declining rate of profit. But what is the cause of this falling ratio? Since this theory abstracts from demand structures and deals only with production, the only reason for a decline in the ratio of output to total capital is that as total capital increases the potential net output decreases relative to it.(3) In other words, the additional capital will be less productive than the original capital, value for value.

Now, productive capacity is a function of the total real capital stock and the available labour-hours, and so the fall in the rate of profit



ultimately requires a diminution in available labour-hours as against total capital. In concrete terms this can only occur in two ways. First, if the accumulation of capital outstrips the increase in the working population; second, if the new capital is technologically devolving (labour-wasting). During an expansion, two things can occur: either capital is accumulated to the point where there are not enough workers to ensure that productive capacity rises at the same rate as capital, or the capital accumulated is of a quality precluding the corresponding expansion of the labour army, or both. In each case, rates of return decline, causing contraction. Contraction alleviates the problem of labour shortage and/or the problem of over-accumulation per se, stimulating a new round of investment and so on.

Both of these scenarios abstract from the real situation under capitalism insofar as technological innovation is concerned. The second (devolving technology) can be rejected out of hand as ahistorical, counter to the laws of capitalism and accidental and atypical where it does occur. The first possibility seems tenable until we remember that the 'labour-hours available' are relative to the productivity of labour and therefore the level of technological development. If the accumulation of capital is accompanied by a corresponding increase in the productivity of labour, then balanced growth (labour-hours/capital) may continue while the working population employed neither grows nor shrinks. Certainly, increases in the productivity of labour today outstrip the value-accumulation of capital, causing a relative surplus working population on a world scale.(4) This theory, then, cannot stand alone as an explanation for periodic crises.

2. Underconsumption. This theory rests on three hypotheses: 1) capitalist development tends to distribute income in favour of profits and against wages, 2) the propensity to consume out of wage income is significantly greater than that to consume out of profits, and 3) the investment demand derived from profit is not sufficient to support sales, since investment capital derived from consumer-spending. Let us assume as a starting point close to full utilization of productive capacity. Given that the realization of profits ultimately depends on wage goods (combination of 2) and 3)), the ratio of demand to output will decline, as wages cannot possibly be equivalent to costs (including wages) plus profit. As actual output adjusts to lower demand, a gap will grow between potential net output (productive capacity) and effective monetary demand.

This leads to a decline in the ratio of actual output and productive capacity which can be termed under-utilization of productive capacity. Up to a certain stage in the cycle, of course, actual output may continue to grow, albeit - like demand - at a slower rate than productive capacity. This would still denote an increase in under-utilization. Assuming a constant rate of surplus-value (or at least one that is not increasing at the same rate as actual output is declining), the decline in the actual output (or income) signals a decline in the mass of profit. If this is coupled with a simultaneous (relative) increase in productive capacity (capital stock with or without additional workers), then the rate of profit will fall. The contraction which follows must serve the objective function of destroying unutilizable capital (in value terms), lowering the wage component of capital to make production profitable, facilitating orders from Department II to Department I, generating consumer demand among the workers in D and making it more profitable again to invest.

While the 'organic composition of capital' theory locates the ultimate cause of crises in the decline of productive capacity as against capital stock (that is, purely in the sphere of production), the 'underconsumption' theory finds it in a decline in actual output conditioned by consumer demand as against full productive capacity. We have already seen the general form of the critique of underconsumption theory (Chapter IV, Section 2.3.1). Generally, underconsumptionism abstracts from the inherently uneven development of the capitalist system and sees only a uniform capital on one side and a uniform working-class (quantitative) demand structure on the other. The primary forms of uneven development left out of consideration by underconsumption theories are by firm and sector on the one hand and by department on the other. In the first case underconsumptionism abstracts from the victors and casualties of the competitive struggle. Only if the demand for commodities is distributed evenly over firms and sectors, and if there is therefore no surplus-profit, will underconsumption hit the economy as a whole, necessitating a downward turn in the industrial cycle. Moreover, upon recovery, capital, rates of profit and demand would have to rise like water to their old level. The real situation is one of competitive struggle for the distribution of the surplus-value which is realized. Underconsumption is spread more or less unevenly over the weaker sectors.

The abstraction from competition, in fact, posits the desired solution in the premises to the argument, and the same is true at the departmental

level. In order to show that the commodities of Department II cannot be sold, it is necessary to assume that Department I grows more slowly or at the same rate as Department II (i.e., that sufficient demand is not generated in Department I). In fact, it will have to grow at exactly the same rate, as it is inconceivable that Department II should accumulate capital not produced in Department I. Now, we know that over the whole system, wages and capitalist consumption is less than the total product in value terms. Therefore, if an increase in the production of means of production and an expansion of the aggregate demand generated in Department I is necessarily followed by a proportionate increase in the scale of production of Department II, then unrealized surplus-value will continue to accumulate in Department II of necessity, and Department I cannot suffer overproduction by definition. In reality, such a situation could arise only accidentally and could not be sustained (in which respect underconsumption theorists are quite correct). Under all other conditions, underconsumption can not be entertained as the sole and ultimate cause of crises.

3. The 'exhaustion of the reserve army' theory. This theory rests on four hypotheses: 1) capitalist development tends to deplete the reserve army of labour as economic growth exceeds growth in the working population, 2) the scarcity of labour increases the political-economic power of workers vis-a-vis capitalists, allowing strong worker organizations, 3) the increase in workers' power precedes an increase in average unit labour costs, and 4) capitalists will not pass on the whole of this cost increase to the consumer in higher prices (presumably because of competition), and so the share of income to wages increases relative to the share to profits. The decrease in the ratio of profits to total income is the original source of the decline in the rate of profit in this theory, and so the cause of crises is clearly seen as existing in the sphere of distribution. An increase in the factor share of wages will lower the rate of surplus-value, and thence the rate of profit, ceteris paribus, causing a contraction of investment, and in physical production and money flows. The contraction restores the reserve army of labour, weakens workers' organizations and allows a swing in factor shares of income to profit. This will condition a recovery.

In considering this theory of cyclical crises, it is useful first of all to distinguish between the industrial cycle and the less frequent 'long-term cycle' which have come to be associated with N.D.

Kondratief.(5) The longer cycles of contraction and expansion as an empirical phenomenon run their ascendant course in about 25 years, and have a downward swing lasting 25 years also. Since the beginning of the Second World War, we have seen an ascendant long-term cycle, lasting until the mid-nineteen-sixties, and most of the following downward swing to the present. Now, the point to note is that the industrial cycle continues to oscillate within the long-term cycle, describing periods of contraction despite the continuing presence of a reserve army of labour in the downward portion of the long-term cycle, and periods of expansion despite full employment and high wages in its ascendant portion. The second of these trends laid the basis for the entry of women into the workforce in the Post-War era, and in combination with uneven development prepares the emergence of migrant labouring populations. Since empirical reality seems to fly in the face of the 'exhaustion of the reserve army of labour' theory, can we pinpoint the theoretical flaw? I think we can.

In sections 1 and 3 of Chapter 25 of Capital, Volume I, Marx examines the relationships of the industrial reserve army of labour, the industrial cycle and the level of wages. From a perusal of this material, the following remarks on the hypotheses put forward in the 'exhaustion of the reserve army' theory are suggested:

Hypothesis 1 states that "capitalist development tends to deplete the reserve of labour." Marx is in basic agreement with this, but he goes further in including the counter-tendency of the rising organic composition of capital in his calculation of the expansion and contraction of the reserve army, and he does not assume that full employment necessarily replaces unemployment, i.e., for him it is an historical question.

Hypotheses 2 and 3 concern the concrete mechanisms through which a depletion of the reserve army leads to wage rises. Marx is clear on this point. "Taking them as a whole, the general movements of wages are exclusively regulated by the expansion and contraction of the reserve army...."(6) Again, agreement.

Hypothesis 4 puts forward the idea that wage rises are the prime cause of a decline in the rate of profit. Here is where Marx differs. The movements of capital, its expansion and contraction, cannot be due to semi-extraneous causes. Capital, itself, is the subject of Marx's book because it is the central determinant in the capitalist mode of

production. Let us finish that quote:- "Taking them as a whole, the general movements of wages are exclusively regulated by the expansion and contraction of the reserve army, and these again correspond to the periodic changes of the industrial cycle."(7) Thus, where the 'exhaustion of the reserve army' theory would proffer the following order of determination of events: industrial reserve army --> rate of wages --> rate of accumulation, Marx himself would wish to turn this full circle and say: rate of accumulation --> industrial reserve army --> rate of wages. An investigation following these reformulated lines would be informative about wage rates, but would merely beg the question of the industrial cycle, since the rate of accumulation (our object of study) is independent.

In similar fashion, Marx polemicizes against the vulgar economists (e.g., Malthus) who attribute the industrial cycle to the expansion and contraction of physical population: "...that would indeed be a beautiful law, which pretends to make the action of capital dependent on the absolute variation of the population, instead of regulating the demand and supply of labour by alternate expansion and contraction of capital [i.e., the industrial cycle]." Malthus and Co. thus had yet another order of determination: available labour-power --> rate of accumulation --> rate of wages. This too is incorrect.(8)

The criticism of the 'exhaustion of the reserve army of labour' theory must now gain some subtlety, for there is a grain of truth in it. Once the rate of accumulation produces a certain reserve army and this acts upon wage rates, Marx says that wages, if rising, may in fact tend to stifle accumulation. Thus, on the one hand, he emphasizes more than once: "...the decennial cycle and periodic phases, which moreover as accumulation advances, are complicated by irregular oscillations following each other more and more quickly...."(9) These oscillations in fact are due to the operation of laws something like those posited in the 'exhaustion of the reserve army' theory, but not in the economy as a whole - only in the supply and demand for labour between branches.(10) On the other hand, wage rises do contribute, at certain parts of the cycle, to the real strangulation of accumulation, as in the very low part of the cycle where wages must fall to revive the rate of profit. However, even here capital is still determinant since, with contraction of capital and the reconstitution of the reserve army, wages do in fact fall. Marx does not elaborate the actual causes of the industrial cycle, and as is well known, nowhere did he leave a systematic analysis of crisis.(11)

Therefore, the third theory of cyclical crisis covered has no particular interest for us here. The first two theories of crisis on the other hand are, in one respect, almost totally correct, but suffer a common damning flaw. While they are correct in isolating a true effect of capitalist development, which turns into a cause of capitalist crisis, they proceed to abstract from every other real contributing element of crisis. On the contrary, we have seen that these theories cannot singlehandedly explain crisis.

Our analysis suggests that the over-accumulation of capital (Theory 1), and the inadequate consumer power of the working class (Theory 2) both play a role in crisis. They interact mutually, and with departmental disproportionality and the tendency of the rate of profit to fall (i.e., in a semi-autonomous way) to motivate a dynamic first of over-production and inadequate realization of surplus-value, then of spreading then general contraction. Just as the regularity of the industrial cycle tends to disconfirm the idea that crises are accidental in capitalism, it also tends to indicate a regular interplay of the factors mentioned above. Hence, we must attempt to set out a multi-factoral dynamic model of the industrial cycle. Much of what follows is already contained at different places in the preceding analysis.

In a passing comment on the industrial cycle, Marx writes: "The course characteristic of modern industry, viz., a decennial cycle (interrupted by smaller oscillations) [consists] of periods of average activity, production at high pressure, crisis and stagnation...."(12) Here Marx identifies four phases in the industrial cycle. The cycle must turn into an upswing, this rise must accelerate, it must turn down and it must decline. We can now distinguish four phases of the industrial cycle: stagnation, recovery, boom and crisis.(13)

Stagnation. At the beginning of the low part of the cycle there are both too many commodities and too much capital accumulated in Department II. Orders to Department I have contracted. But Department II goes on selling its commodities and the process of clearing excess stocks begins, albeit at a slow rate. Department II also goes on producing with the fixed capital it has accumulated and so need not place orders with Department I. For these reasons the level of production in Department I falls below that of Department II in the depression, preparing what we might call the 'original disproportion'. Wages fall under pressure of a still growing reserve army of labour. At first production carries on with

the aid of credit, which is inflationary.(14) With stagnation, however, many firms have already been ruined, and the demand for money drops off. Only at the bottom of the cycle does the rate of contraction of capital overtake the rate at which the rate of profit is declining.

Recovery. During the slump the rate of profit has been very low, such that no reduction in interest rates could revive investment. But as stock piles of consumer goods dwindle with lower prices and less productive activity, the price of goods stops falling and slight reinvestment is stimulated in Department II. At this time capitals in Department II start to think about retooling, since the prices of raw materials and means of production are at their lowest, and wages remain low because of the swelled reserve army of labour. Prices have stabilized, and reinvestment will be profitable. The funds for the new, devalued, fixed capital have been hoarded during the period of stagnation by only a fraction of all capitals, whose advantage is thus also reproduced on an expanded scale in the next cycle. The new fixed capital involves new technological advances developed at the height of the boom, which have lain idle and depreciating for the whole of the recession. This situation of a few leading capitals retooling with cheap means of production when the market is clearing encourages investment by raising profit expectations. The rate of interest has fallen with the low demand for money, hence, once the leading capitals have proved profitability, credit is readily available at affordable rates. Thus, profitable investment in Department II recommences.

Orders begin to flow from Department II to Department I, reviving selected sectors. This increases employment and consumer power for the realization of the surplus-value of Department II without increasing wage rates in either department. This stimulates further investment in the production of consumer goods. Department I cannot immediately cope with the orders; hence, prices rise and so do profits. Department II increases its labour army and sets it to work on old means of production. Hence, the organic composition of capital tends to fall, not rise. This keeps the general rate of profit rising, as do low wages and faster turnover times. A rising rate of profit and a steady rate of interest, up to a certain point, further ensure rising investment rates and retooling.

Boom. The original disproportion in growth in favour of Department II is transformed into its opposite as orders for fixed capital flood in. Department I undergoes a boom of activity as it strives to meet the very

profitable demand, and capital flows into this department. This disproportion is exacerbated by the durable nature of fixed capital (seven, ten or fifteen years' 'worth' must be purchased in one set of plant), and, the expansion of the capital of Department II also requires seven to ten years' worth of additional means of production. The expansion of the capital goods sector is the main reason for the depletion of the reserve army, which increases consumer power and temporarily removes all limits from the expansion of Department II except the rate at which it can install new capital. The smaller the reserve army becomes, the higher wages can go. Hoarded money is now dissipated and so interest rates rise. On a rising productive base all forms of speculation and lending become profitable.

Crisis. The demand created by even full employment is not unlimited. At a certain stage in the cycle, the supply of consumer goods exceeds social demand because of the rapid increase in absolute output and the productivity of labour. However, at the height of the boom new replacement and additional capital goods have already been ordered and continue to be ordered for several reasons. 1) Consumer goods continue to be sold to merchants and shop-keepers who do not wish to reduce their turnover and are not yet clear whether or not the market is in decline, or what their share of a possible decline would be. 2) High wages mean that a decline in realization may turn into a decline in the rate of surplus-value and then a decline in the rate of profit. The tendency, therefore, is to increase capitalization to ensure a normal market share. 3) Each individual capitalist knows that if he adjusts his output to demand(15), other capitals will not follow suit but will increase their organic compositions of capital to raise their individual rate of profit above the average. The now high rate of interest reduces net profit to borrowers and evokes further investment to maintain the mass of profit. Thus, it is impossible both to judge the point where supply exceeds demand and to achieve a uniform adjustment of production to that point.

With overproduction in Department II, underconsumption is soon felt, first by retailers who have overstocked. As their rates of profit begin to fall, they cut their losses by cheapening commodities. Orders to producers decline at the same time as production capacity and output reach their heights. The capitalist is unsure of the signals he receives from the market and so increases productivity as far as possible above average.



The increase in the organic composition of capital is, by itself, sufficient to induce a decline in the general rate of profit all things remaining equal, at this stage. This declining rate of profit heralds simultaneous over-accumulation (over-capacity of means of production) and overproduction. On the doorstep of the real crisis, the reinvestment funds of the various capitalists are tied up in commodity stocks. Considerable tension thus arises in the money market, where interest rates undergo another, smaller peak as capitalists seek working capital to pay wages, buy raw materials and take receipt of new fixed capital without lowering commodity prices to move stock. The constant capital they have accumulated is not valorized at the normal rate as effective (realized) turnover slows right down. Since they cannot get back the money invested in constant capital at the normally expanded rate, capitalists now hold on to it for longer, especially as the money market tightens up. This capital lies idle and so does not employ workers, which squeezes consumer-power and tends to reduce sales still further. The increase in the ratio of constant capital to realized surplus-value indicates a further decline in the rate of profit. Eventually, commodities are devalorized and sold to pay bank loans.

As it becomes clear that it is now a case of sharing losses and not profits, each capital in Department II wants a smaller and not a larger share. For this reason, and because greater quantities of the reinvestment fund are needed for working capital, the expansion of production in Department II slows down and in some sectors begins to contract. This means that orders to Department I decrease. Department I has itself been subject to capital accumulation during the 'over-heating' period and the first phase of the 'real' crisis. Overproduction of consumer goods thus turns into overproduction of capital goods. This disproportion now subjects Department I to the same rigours which Department II has undergone. Only here, the idle capacity is on average much greater in value terms. This, now unused, fixed capital was bought with credit money to a larger extent (capital flowed in at the beginning of the boom attracted by the higher rate of profit), and a rising rate of interest now militates against Department I being propped up with credit to the extent of Department II. Moreover, it has now become a case of banks trying to avoid losses too. At the beginning of the crisis they were inclined to lend in order to protect existing investment loans. By the time Department I needs credit support, however, the banks are less likely to give it, so the sector most in need of support is hardest hit.

Department I is now forced to limit its expansion and production, workers are laid off and so a vital source of consumer demand dwindles producing a new level of underconsumption and corresponding reductions in the rate of profit, which again finds its way into the ledgers of Department I.

As credit becomes the only antidote to the worse effects of the crisis - ruin - a disproportion develops between productive sectors and lending sectors. Interest rates climb relatively, above the rate of profit which makes banks very selective in their lending policies. Companies now cut prices to realize working capital and sell off assets. Bankruptcies begin to proliferate, there are defaults on orders, and accounts are unpaid. Prices continue to fall, profit rates and production drop to their lowest level.

## 5.2 OVER-ACCUMULATION AND FINANCE CAPITAL

In this section I look at crisis and recovery again with special reference to the role of over-accumulation in these phases of the industrial cycle. Then the response of finance capital to the crisis is discussed and I attempt to draw some conclusions about the influence of this response back on the industrial cycle.

### 5.2.1 Over-Accumulation and Crisis

From the contrasting nature of the two antithetical phases of the industrial cycle - crisis and recovery - we can derive the objective function of crises in the capitalist economy. The conditions which correspond to crisis are too much real (commodities) and potential (idle means of production) productive capacity in society as compared with the effective capacity of the working class to consume. The conditions for recovery, therefore, are the dissipation of these values, or the devalorization of the excess capital. This is necessarily attended by minimal growth (if any), and low rates of profit. It is also accompanied by the reconstitution of the original disproportion. Once this condition applies, production may fall marginally below demand, profits increase, and investment again becomes viable.

The ground for a recession is prepared by a falling rate of profit. Increasingly, Keynesian inflationary anti-cyclical policies are unable to avert recessions by keeping the real rate of profit out of company ledgers until the upswing in the industrial cycle.(16) Such was the case

in 1974, and the recession was very hard-hitting. At the point of downturn government subvention and stimulation of the economy (in a word, injection of money from outside the regular sphere of circulation) begins to have bad inflationary effects. As book earning rates fall, costs go up and demand tapers off. Comparisons with inflation adjusted-investments (even savings stock which returns no real profit) are unfavourable, and interest rates climb above rates of profit. At this time the stock of commodities grows simultaneously with capital invested in stocks (i.e., unproductively invested). In short, capital does not reinvest at the normally expanded rate because, in the first place, it cannot realize enough of its surplus-value to do this, and, secondly, the disposable income that is on hand is either used as working capital or turned into stocks and shares, since it is not expected to return an adequate profit in the future. Objectively, all fail to complete their circuit and cease to act as capital in their sphere of origin.(17)

According to the laws of uneven development, however, the point of contraction is different for different firms and sectors. Fluid finance capital ideally attempts to avoid the pressure to contract by being mobile between sectors. It successively invades profitable spheres and evacuates less profitable ones. Here it demonstrates its superiority even over monopoly capital, for while the latter is able to withdraw only temporarily from the equilization of profit rates the former is permanently involved, but being superbly mobile it can continually invest where profits are above-average, and withdraw before equalization is realized and turns to over-compensation. This is why investment in stocks and bonds, mediated through finance institutions, is for a time so much more profitable than the average capital, or the single capital on average. Firms that at first avoid contraction cannot do so indefinitely in a 'climate of stagnation'. They maintain normal expansion only because they have won out in the competitive struggle which has been intensified by the falling rate of profit, underconsumption and prior contractions. But, to say that they are more competitive is to say that they have a higher organic composition of capital and thus, partially at least, the burden of general overproduction is moved onto other firms. They utilize all their capital at the extra cost of over-capacity to others through the more efficient use of labour. This, in itself, merely signifies continuing downward pressure on the rate of profit, more extensive contraction, and a new round of competition at the next level of labour productivity. At each level the less productive firms drop away.

The same developments or conditions which produce a rising organic composition of capital, a great mass of commodities, accelerated accumulation and a declining rate of profit simultaneously produce a relative surplus working population. At the point where it is apparent that too much capital has been working overtime, it is clear that relative to the rate at which capital can expand too many workers have been employed to set it in motion. As the law of value impresses on the capitalist class its excess of capital, it also reveals that there is too large a working population relative to the profitable level of utilization of capital. The new employment of workers ceases, and some additional workers are 'set free'. Insofar as the working population is mobile, it moves into more profitable spheres along with capital, but, generally, unemployment increases. This is not helped by the fact that the most profitable branches of industry depend for their above-average share of surplus-value on greater labour productivity and constant technological revolution, which makes the expansion of their labour armies less than proportionate with their expansion overall. In other sectors, as I mentioned in the previous section, as soon as it becomes clear that it is now a case of sharing losses and not profit, each capital wants a smaller, not a larger, share. Therefore, contraction of production and labour armies follows over-accumulation.

### 5.2.2 Over-Accumulation and Recovery

The excess capacity of constant capital, working through the period when the excess is as yet unrecognized, produces general overproduction in Department II, spreading to the whole economy as the imbalance of growth swings in its favour. When the crisis hits, this overcapacity and overproduction is redressed by the withdrawal and destruction of capital (this latter need not involve the physical destruction of means of production, but only of their capacity to act as capital, which means the destruction of their value, or devalorization). Ideally, capital to the value of excess capital will be devalorized. This is the objective function of crisis in capitalist production. There are various means by which this devalorization might take effect:-

1. Commodity stocks have to be sold below their price of production to be sold at all. Failing this, they may be more or less permanently withdrawn from circulation by physical and moral depreciation.

2. Various forms of credit and account are defaulted on, hence they are withdrawn by deferred payment and destroyed by writing off, bankruptcies, etc.
3. Fixed capital lies idle and is subject to permanent withdrawal or physical and moral depreciation. Raw materials depreciate.
4. Variable capital is depreciated by the depression of wages below their hitherto more or less regular value by the presence of a growing reserve army of labour.

The devalorization is distributed unevenly in the competitive struggle. Some capitals are destroyed, others come to a standstill and some suffer mere under-utilization. The 'withdrawal' of capital, we have seen, is sometimes equivalent to its transfer into sectors of continuing profitability, such as monopoly and imperialist sectors. If the leading capitals reach the limit of the transfer of the burden of the crisis on to other sectors, then these investments too may devalorize with a crash in the stock market and a bank panic. At that stage we have depression, and new sources of surplus-profit must be found.(18) The withdrawal of capital is often more overtly speculative, with quick transfers of stocks, land or gold. However, in the course of the crisis these commodities themselves steadily devalue, and it is unlikely that the money-owners selling out of land or gold at the end of the recession (i.e., to cash in on rising industrial profits) will recover their original investment even though land and/or gold may have been the best investment open to them. Gold and land then revalue in the course of the boom - absorbing value which will be re-emitted during the next recession.

In the case of commodity stocks we must distinguish between the departments. The surplus of durable goods in Department II may be slowly cleared, or part of the surplus may never sell and depreciate on the shelf because of the limited introduction of a better or cheaper product during the crisis, bankruptcy and wastage, physical depreciation or a changing use-value structure of demand. Perishable consumer goods will, all things remaining equal, suffer an initial loss and then sell at reduced rates with steadily falling prices. The commodities of Department I are not consumer goods, but so long as the consumer market is glutted they will depreciate, for their sale depends on a rising rate of profit in Department II, and that cannot occur before supply falls below social demand. Hence, unlike consumer goods which are sold as they depreciate,

capital goods depreciate but are not sold until the consumer market is finally cleared. In the process of being sold they revalue because of the disproportion between the two departments. They are generally durable and so do not physically depreciate before use, and because they embody never-before introduced technology, there is no reason why moral depreciation should not be mitigated by increasing demand.

With the lion's share of capital tied up in commodity stocks and means of production, ready money becomes the increasing focus of business dealings in the crisis. Each firm needs 1) bank credit to provide a wage fund as an increasing proportion of wages is set down to come out of next months returns, to pay for auxiliary services, and to pay off one account whilst running up another, 2) credit or account, for delivery of raw materials, premises, transport and mechanical repairs, etc. At the same time, each firm is forced to extend credit to its buyers to ensure sales. When a large percentage of available money credit and credit of account is working, the money market becomes tight for creditors are simultaneously debtors vis-a-vis other sources of credit. Where the credit does not 'stretch', bankruptcies follow, with deleterious effects on creditors who are obliged to write off the account at least partially.

Installed fixed capital depreciates through use as normal, although more slowly. The effects of shutdowns and idleness depreciate capital physically. The major point of moral depreciation of fixed capital is in recovery, when there is a rush to install new machinery and old capital becomes relatively less productive and thus less profitable. Where a firm suffers bankruptcy, or comes to a standstill, its assets are often stripped from the plant and sold off at depreciated rates to cut losses. Raw materials, which should experience a slightly more steady demand than fixed capital, nevertheless depreciate in the same ways as a consumer good might. In a depression raw materials production slows right down, and prices fall.

In the presence of a swelled reserve army of labour, wages also fall, and this is another factor which sets the scene for a reconstitution of normal capitalist production. A decrease in the average wage increases the rate of surplus-value, which provides a tendency (not expressed in crisis) for the rate of profit to rise. This is reinforced in Department II by the cheapening of raw materials and curtailment of all but essential maintenance and servicing of fixed capital. A higher rate of surplus-value on a smaller labour army and a smaller yearly capital

investment, although objectively favourable conditions, still need the final sign - the clearing of the consumer good market, relative increase of demand and stabilization of prices. Investment now begins to look more profitable in Department II and means of production are at their cheapest. Firms look to retool. Prices in Department I stabilize, then rise rapidly, and the recovery is achieved.

### 5.2.3 Finance Capital

To mitigate a crisis, a certain proportion must be struck between withdrawal of capital and its destruction. The distinction here depends on whether or not the capital revalues and is useful again after the recession. When means of production lie idle, they have been withdrawn from circulation, but they are not necessarily destroyed as capital. If they depreciate and cannot be either sold at value or set to work profitably then capital has been destroyed. If they weather the recession, and emerge with their full value to operate just as before, then capital was withdrawn but not destroyed. Now, it is highly unlikely that a machine, for example, would endure a crisis in this way, for the function of crises under capitalism is to destroy capital. On the other hand, it is likely that a certain quantity of money capital constantly being turned to the most profitable investment would endure. Thus, finance capital is able, effectively, to withdraw from circulation in sectors experiencing overproduction, and, rather than depreciating, invest in the most profitable or least unprofitable sectors. The withdrawal of capital in this way 'cheats' the industrial cycle, for the capital is not destroyed but maintains or expands its value and after the crisis is fresh and useful for making bigger profits.

As more and more capital becomes concentrated as fluid finance capital, in fewer, more capable hands, the ability of the key (big) individual executive boards to reduce the effects of crisis to their capital at first increases. This has a dual effect. On the one hand, it means a multiplication of the destruction of numerous smaller firms in order to achieve a sufficiently high proportion of destruction to withdrawal of capital overall. This pushes up the profit of finance capital even further above average. On the other hand, with the growing concentration and centralization of capital in banks and finance institutions, withdrawal without destruction reaches its limits. That is, insufficient capital is destroyed to allow an up-turn. Since 1974 it

seems that the correct proportion has been impossible to achieve. Revaluation and reinvestment after 1974 was too great, and another slump followed in 1978. Thus, in the medium run a complete recovery is not prepared by sufficient devalorization of capital.

This situation produces a change in the way the industrial cycle presents itself. Since there is not sufficient devalorization there is not a genuine boom. When profit rates begin to rise, capital floods back into many sectors too quickly. The now rapid rate of technological advancement ensures that there are more developed means of production ready. Investment by productive firms is no longer the result of hoarded money and genuine accumulation. Rather, to maintain a competitive edge, reinvestment is financed partly with new stock issues but mostly with overdrafted credit. The influx of capital is too great; rates of profit flatten out, then fall. Prices stabilize but do not rise much, if at all. High levels of technology in Department I cheapen capital goods but do not generate a large consumer demand. Recovery turns to crisis before it gets properly under way, and finance capital again withdraws. Thus, the fluctuations within the industrial cycle challenge the severity of the cycle per se. The expansive phases of the cycle are more often curtailed, and only one in several cycles results in a genuine revival, and then only significantly for the leading capitals. Necessarily, however, the tendency to ruin grows for those firms, sectors, areas and countries whose capital circulates outside the financial sphere. These capitals themselves then undergo large-scale concentration. Sectors consolidate, and at the national level industry is assisted by the state.<sup>(19)</sup> When Department II profits begin to improve, there is a massive inflow of capital in the form of bank overdraft and stock issue. This is so rapid and so big that overproduction quickly follows the mitigation of underconsumption. Just at that point Department I, whose regular profit peak is higher than that of Department II, has received orders and is expanding. Capital rushes here in the same form, but soon the boom collapses. The shortfall in realized profits to loans is taken up by the state, to whom international finance capital is normally only too willing to lend.

The situation in which finance capital is put requires further anti-devalorization measures, including the movement of capital into different currencies, different banks, different precious objects (metals, gems, art objects, priceless objects), and so on. It also involves double-



dealing, exacting political concessions, promulgating wars and investment in sectors with guaranteed markets - primarily, high technology armaments, nuclear weapons and space exploration. In the last analysis, finance capital also suffers excess accumulation, which by its very nature cannot be completely or adequately mitigated by the regular industrial cycle. In late capitalism, it tries to expand its markets by moving into service sectors. and finds a new source of surplus-value in constant technological revolution.

### 5.3 INFLATION AND THE STATE

If we look only at the market and its laws of supply and demand and leave the production of value and its imperatives out of consideration, then inflation appears as a rise in commodity prices and can have only two causes. One is increasing costs, the so-called "cost-push" theory, and the other is excess demand, the so-called "wage-pull" theory.(20) Some economists, the neo-Keynesians, for example, are prone to the market view where inflation means a rise in the consumer price index and little more.(21) In his serious attempt to analyze inflation in New Zealand W. Rosenberg writes: "Because of the fear of a repetition of the cumulative effects of the 'excess supply' situation, which occurred during the great depression of the thirties, 1945 to 1970 economic policies concentrated on the creation of excess demand. It can be seen that this solution leads to inflation once resource expansion becomes restricted by high levels of employment..."

"We have seen" he continues "that the Keynesian remedies no longer work. On the other hand, Keynes' analysis of the reasons for expansion and contraction is still basically correct and very useful. Thus inflation, shortages and foreign exchange crises are the result of an excess of aggregate demand over aggregate supply, expressed in sectoral terms..."(22)

The problem for the cost-push theory is that inflation on one market, the consumer-goods market, is explained by inflation on another, the producer-goods market. What causes that inflation? Clearly inflation on another, or the same (!) market. Thus, inflation explains inflation, which merely begs the question. The problem for the wage-pull theory is that it also depends on prior inflation - in the price of the commodity labour-power. But excess demand for labour-power is surely a result of excess demand for finished goods, so what is so bad about inflation? It

must surely be accompanied by a rise in the rate of profit. If wage rises, in turn, cause price rises, and these are roughly proportionate, then where is the rub? Surely no one wins and no one loses except the appropriator of surplus-value, who retains his 'naturally' advantageous position. The problem for W. Rosenberg's theory is, again, specifying just why the business community is so conscious of the rate of inflation. One can understand that Keynesian policies are concerned with creating demand, but would not their failure mean insufficient demand had been created, and anyway, are they not themselves inflationary in nature? One can also understand that shortages and rising commodity prices are not favourable to each individual consumer, but to each individual capitalist would they not be an undreamt of haven of profit? Why then is inflation an aspect of capitalist crisis? To explain this we must take into account not only markets, but production; not only prices, but value; not only commodities, but money.

We must first hark back to Marx's theory of money. The reader will remember from Chapter II, Section 1, that for Marx money was the universal equivalent form of value. The labour-time socially necessary for the production of a certain quantity of gold was equal to the labour-time necessary for the production of a quantity of commodities, of all types, which would be exchanged for that gold. Thus, the law of value determines average prices, and prices are the most developed form of the determination of the exchange ratios of commodities. It is immediately obvious that prices may change for two reasons: a change in the value of gold, or a change in the value of other commodities. But there can be nothing to alarm us in these types of price changes, for they actually express a change in the social value of the thing, which adjustment is a precondition for capitalist commodity production and exchange. 'Inflation', in fact, makes no sense in terms of gold-money.

'Inflation' cannot be conceived merely as rising prices, for prices can rise perfectly 'sanely' for other reasons, i.e., according to the laws of production and the market, the sine qua non of capitalism. Inflation is rather the devaluation of the unit of currency. It can therefore be experienced only by a means of circulation which has no value itself, and that means paper money. If we increase the quantity of gold in circulation we increase the amount of value in circulation, but this will not be inflationary in the long run, for each ounce of gold has a certain value. Much of it may have to be hoarded because it cannot

be spent, or because it devalues temporarily with over-supply, but it will revalue under normal conditions. When paper money came into widespread circulation, it represented a certain quantity of gold. So long as the quantity of paper money in circulation did not grow excessively, and always stood for a quantity of gold in the possession of the issuing bank, there were no real problems with this. Paper money was a convenient, economical means of circulation, which moreover allowed the extension of credit against the return of real riches in the industrial nations who were expanding their trade. However, it is clear that if the quantity of money tokens which represent a quantity of gold increased, then each unit of currency will devalue, producing inflation. The questions to be considered are, 1) why should the quantity of paper money in circulation increase, and 2) why is this bad?

Before the collapse of the gold standard(23), each unit of paper money represented a quantity of gold, and so when it was put into circulation it represented more an increase in value in circulation than a devaluation of paper money. Credit did exist, but it was normally granted out of bank reserves, i.e., also representing a quantity of gold, and had no significant effect on the industrial cycle. However, at about the time of the great depression, Keynes discovered that an inflationary increase in the money supply could be used to even out successive industrial cycles. From that point government policies began to change. The gold standard collapsed under pressure of governments wishing to utilize the Keynesian strategy, and banks were then allowed to grant great quantities of credit. This credit money was used by productive capitals to mitigate short or medium-run declines in the rate of profit. A regular "credit cycle" thus arose in articulation with the industrial cycle.

In the downward swing of the industrial cycle, stockpiles of unsold commodities accumulate. This decreases the trading profit of companies and squeezes available working capital, which is used for the payment of wages, repairs, property rents, transport, office equipment, and so on. Production contracts. At that point the credit cycle begins its upturn, for the value trapped in unsalable commodities cannot be drawn on to maintain the business until the market is cleared. The purchase of services and labour-power must carry on, albeit on a smaller scale, if the produced value is ever to be realized. This requires credit. The first cause of inflation, then, is bank overdraft credit which put more money into circulation in the low part of the industrial cycle. This has

the effect of keeping more firms viable through the recession, until, upon recovery, the credit money they have obtained would fall 'naturally' out of circulation as profits and bank balances revive, accounts are paid and interest rates peak (making marginal capitals invest in finance institutions rather than borrow to invest productively at below the rate of interest). Thus, the average amount of money in circulation over the whole cycle should equal the value actually produced divided by the velocity of circulation.

Now the state is closely connected to the extension of overdraught credit. In many cases, depending on contingent circumstances, it underwrites bank loans at given interest rates, manipulates interest rates and prints the necessary paper money. This is not to mention the role of nation-states in the original collapse of the gold standard. Governments also control the regulations relating to the extension of credit by companies to final consumers - hire purchase and so on. This is the second cause of inflation which took effect roughly from the Second World War. Hire purchase (and other forms of credit to private persons, e.g., mortgages) reduces down to bank loans to firms, individuals and households, and this must increase the money supply.(24)

The third cause of inflation is direct and indirect "injection" of money into the economy by the state, other than through private banks. This also took effect from the Second World War. Some Marxists writers attribute inflation solely to government military outlays, but this is not a completely satisfactory explanation. The case of New Zealand, for instance, which has no military sector, throws doubt on this theory. Arms expenditure in imperialist countries must be seen in the context of the overall Keynesian strategy which most modern governments have adopted.

W. Rosenberg was quite correct to point out that Keynesian policies aim to create demand. But he goes on to argue that inflation results from the creation of excess demand which leads to a rising market-price in accordance with the laws of supply and demand. On the one hand, however, it is not necessary for governments to create "excess demand" in order for commodity prices to rise, on the other hand, "excess demand" is not a sufficient condition for commodity prices to rise steadily over a number of years given the formation of a general rate of profit and the mobility of capital. If we assume that commodity values remain roughly constant, then all that is necessary for their prices to rise is an expansion of the money supply. Monetarily effective demand need not be in excess. If

government expenditure increases the quantity of money in circulation, it causes inflation ipso facto.

The overall Keynesian strategy attempts to ride out the recession by "stimulating" effective demand. This is done by several means. First, the government can simply buy the commodity itself. This is the case with considerable quantities of meat and wool in New Zealand. In the U.S.A. this tactic has been taken to extraordinary lengths. Not only does the government stockpile mountains of agricultural produce, but in certain lines it maintains demand whilst allowing the farmer to forego the formality of actually producing the product! Such is the case in parts of the grain producing industry. Second, the government can set up bureaucracies or industries in non-competitive sectors of Department I, buy all the commodities itself, and generate demand among its workers. Such a possibility conditioned the growth of the arms industry in the imperialist countries, and of the "Think Big" projects in New Zealand. Third, the government can underwrite selected investments of firms and sectors (the selection process having lower order, conjunctural determinations) over and above the support of private banks and its effects which we have already seen. Fourth, contracts may be let to industries in Department I for public works. The third and fourth tactics are clearly illustrated in the growth of the Fletcher-Challenge corporation in New Zealand.(25) An alternative tactic to the third and fourth possibilities is the guaranteeing of profitable conditions for foreign investment. However, where a substantial local capital exists, this must be used selectively so as not to drive local business bankrupt and destroy the reason for stimulating demand. In less developed countries with a smaller bourgeois class, the proceeds from foreign investment may be sufficient to maintain a higher standard of living for a few.(26)

Ultimately, the Keynesian strategy conditions the rise of the modern phenomenon of deficit financing, as I have explained (Chapter IV, Section 3) and in successive cycles the ratio of credit (debt) to domestic product grows. On the basis of credit, the only security from recession is further credit, which means creeping, then galloping inflation.

If inflation means paper money is devaluing, but at the same time its quantity grows proportionally, where is the harm in it? In the first place, inflation is a bad effect not a bad cause. That is, it signifies the continuing stagnation of the economy through the continuing need for

credit money. Only when we recognize that it usually signifies a continuing need to artificially prop up the economy can we truly grasp its significance. Inflation is an expression of more deep-seated tendencies. In the second place, however, inflation itself can, at a certain stage of the crisis, in combination with other factors, produce bad effects. Quite apart from being caused by high costs, it now pushes costs up which militates against the purchase of new means of production. This prolongs stagnation, and keeps the rate of profit down such that savings and entrepreneurial hoards are invested unproductively. Money borrowed from banks is used as working capital or turned to speculation. Wages become "sticky" in the Keynesian terminology, and will not fall without long struggles. Finally, the destruction of capital does not occur, and a new boom cannot get under way.(27)

The objective function of crises is to valorize the total capital by the massive devalorization of particular capitals. The more highly developed the credit cycle, however, the greater difficulty the laws of capitalist production have in expressing themselves in this way. The longer the crash is put off, the more credit is required, and the greater are the inflationary tendencies. The Keynesian policy, being a policy for national economies, is aimed at maintaining the national capital until the world economic recovery. With the floating of one national economy, though, another must sink doubly low for sufficient devalorization to occur. Hence, with a highly developed world economy this strategy may succeed if only one or a few countries did it. But when the bulk of the developed nations follow this pattern, the crisis cannot take full effect; hence a full recovery cannot take place, as insufficient capital has been destroyed. This is clear, for example, in the New Zealand government's stockpiling of agricultural goods. The idea is to release these goods on to the market in times of recovery. But which market? The U.S., for instance, has its own stockpiles many times larger. As world stockpiles are released, the market becomes glutted again, and the recovery is curtailed. Underconsumption does not automatically halt the new overproduction as capitals and countries are competing for what may be their last chance to remain viable. The industrial cycle thus becomes flatter and less violent for the world as a whole, and its internal oscillations become sharper and more catastrophic for some particular countries. Although industrial cycles themselves are less marked, successive cycles are articulated on a downward trend - into depression. As credit accumulates over several cycles, the over-accumulation of

capital (unrealized value) grows, and inflation must increase to support this through the next slump.

There are basically two means of escape from this downward spiral: there must either be a boom without a crash or a huge crash to facilitate a boom. A boom without a crash could be supported only by a huge extension of markets (penetration of capital into non-capitalist areas, sectors and countries) or a new technological revolution producing a new source of surplus-profits. Failing this, a decent crash is needed in which substantial capital is destroyed. The political (inter-nation and inter-class) repercussions of what would be the biggest crash in the history of capitalism, would be considerable. If we consider the major imperialist countries Japan, U.S., and the E.E.C. nations - then a portion of these to near the value of excess capital would have to be destroyed economically.

## NOTES TO CHAPTER V

1. T.E. Weisskopf: 'Marxist Perspectives on Cyclical Crisis' In U.S. Capitalism in Crisis Union of Radical Political Economics 1978 pp.241-60

2. The total company income is figured to be the total wage packet plus profit. The assumption is that the wages of workers plus Department II profits must flow back into the consumer-goods sector before it can, in turn, make purchases from Department I, which thus realizes the profits of the producer-goods sectors. If the exchanges which realize this income are on average at value, then income must correspond in value terms with output.

3. "...the theory is predicated upon changing conditions of production, which affect the ratio of productive capacity to capital stock, rather than changing conditions of consumer demand, which affect the rate of capacity utilization." (T.E. Weisskopf: 'Marxist Perspectives on Cyclical Crises' In US Capitalism in Crisis. op.cit. 1978.)

4. It would be misleading to consider only industrial countries here, for the bad effects of capitalist development are moved on to underdeveloping countries as far as is possible.

5. The long-term cycle, or 'long wave', is a topic we cannot, unfortunately, give explicit consideration to. For further references see Mandel: Late Capitalism Chapter 4.

6. Marx (1978) Capital Vol.I p.596. (I suspect that Marx would be prepared to acknowledge a greater number of concrete mechanisms here.)

7. Ibid p.596 (emphasis added) c.f. "...the rate of accumulation is the independent, not the dependent, variable; the rate of wages, the dependent, not the independent, variable." - p.581  
"Relative surplus-population is therefore the pivot upon which the law of demand and supply of labour-power works. It confines the field of action of this law within the limits absolutely convenient to the activity of exploitation and to the domination of capital." - p.598

8. The quoted text comes from Marx (1978) op.cit. Marx thinks he finds the rational kernel in this theory: "The above economic fiction confuses the laws that regulate the general movement of wages, and the ratio between the working-class - i.e., the total labour-power - and the total social capital, with the laws that distribute the working population over the different spheres of production." - p.598

9. Marx (1978) op.cit. p.596 (emphasis added)

10. See note 6 above

11. This was originally planned for Volume VI of Capital, and is included in the 1857 outline of the work, but is absent from the 1866 outline. See Rosdolsky (1980) The Making of Marx's 'Capital'. pp.10-12.

12. Marx (1978) op.cit p.593

13. In the presentation, and part of the content, of the phases of the industrial cycle here I owe a debt to the work of E. Mandel. This mode of presentation of "successive" phases of the industrial cycle is a simplifying device which breaks up the industrial cycle in both the historical a logical sense, but does not preclude the recombination of the elements from each phase in the explanation of a real case. Mandel's presentation of the subject is one of the clearest accounts I have come across. See his Marxist Economic Theory. Vol.I. Chapter 11.



Under the heading of 'Recovery' I also borrow from Mandel since my own studies have been mainly concerned with the crises and not the up-turns in the capitalist economy.

14. See below, Section 3

15. The task of adjusting output to demand would by no means be easy in itself. The capitalist has an intimate knowledge only of his own business and cannot necessarily judge 1) if demand has been exhausted, 2) if his falling profits indicate overproduction or a diminishing market-share based on below-average productivity, 3) if his rising or stable rate of profit indicates anything other than a continuing expansion of the market.

16. See below, Section 3.

17. That is, stocks and shares move resources into other spheres where they may act as capital.

18. See Chapter 4.

19. This is discussed further in the next section.

20. A concise overview of these theories can be found in Samuelson et al. (1975) Economics pp.840-45.

21. "The word "inflation" is now generally accepted as denoting simply a tendency for prices to rise on the average. The represents a departure from its original meaning, which referred to increases in the money supply or, in some contexts, to increases in the money supply in excess of increases in the amount of gold in the country. The link between the original and the present meaning is to be found in the traditional view that prices were determined [! - read regulated] chiefly by the money supply. Thus, pre-Keynesian economists felt able to use the term "inflation" to describe both increases in the money supply and rising prices. Modern usage, however, separates and fact of rising prices from its causes and reserves the word "inflation" for the former. (Samuelson et al. (1975) op.cit pp.839-840)

22. Rosenberg, W (1978) The Coming Depression p.28.

23. "...the gold standard...operated in its purest form in the half-century before 1914. It was disrupted by World War I, partly restored in the 1920s, abandoned in the depression, revived after 1933 and - in a greatly modified form - continued after World War II." (Samuelson et al. Economics (1975) p.738).

24. Private indebtedness should not be underestimated. Mandel, for instance, puts the total private debt (including mortgages) as a percentage of the total disposable income of U.S. households at 93% - Late Capitalism p.448

In New Zealand the Christchurch Press carried the following report on the first of December 1982: "Hire purchase advances for the three months to September this year were 18.1 per cent up on the comparative figure last year.... For the September quarter this year advances were worth \$201.7 million. In the June quarter this year the figure was \$216.1 million. In the September quarter last year the figure was \$178.4 million....Advances in the latest quarter on motor buses, trucks, and tractors increased 29 per cent over the September 1981 quarter. Cars, motor-cycles, and caravans increased 11.1 per cent; plant and machinery increase 25.3 per cent; and household and personal goods, including television sets, increased 16.1 per cent."

25. See Jesson, B (1980) The Fletcher Challenge

26. A fifth tactic, which is hardly specifically Keynesian, is to seek export markets. In New Zealand we need export markets from the start, to realize the surplus-value of Department II. But in crisis, export markets become even more important. Here we have the peculiar situation of continual overvaluation of the New Zealand dollar on the world market to encourage the import of means of production. This tends to decrease export potential, and so the government intervenes with export incentives (New Zealand Export/Import Corporation established 1974). These, too, are inflationary.

27. Thus, the rational kernel of the cost-push and demand-pull theories can be seen in the real, though secondary, effects of inflation once it has been set in motion in the way I have described. No wonder we arrived at the cost-push tautology that inflation causes inflation! Economists are prone to these tautologies because 1) they do not look beyond the market and its laws of supply and demand, and thus increasing prices follow from increasing demand, 2) this is confirmed for them by the operation of Keynesian demand-creating policies, 3) once set in motion inflation does in fact have bad effects which require further credit and thus produce further inflation. Eventually, the case is completely turned around to the point where inflation is used to explain the rate of accumulation. It becomes the independent, not the dependent, variable.

## Chapter VI

### CONCLUSION

#### 6.1 SUMMARY

The foregoing analysis has offered a conception of capitalist production and on that basis derived or conceived of economic crisis. I believe the logical steps between the capitalist basis and its economic crises are valid. In this case, therefore, we treat the capitalist system of production itself as the explanans for the crisis. Crisis is thus conceived as a natural aspect of capitalist production.

In order to elaborate the system of causation which operates between the capitalist basis and the real crises of capitalism, four mechanisms through which capitalist development periodically expresses itself in crisis were outlined. They are the tendency of the rate of profit to fall, disproportionality, underconsumption and over-accumulation. These again helped to define the elements between which they mediate: the fundamental laws of capitalism upon which the incipient crisis depends, and the phenomenal forms of this crisis which capitals experience. In those sections of the thesis which were concerned with the role of the state in crises I also discussed the crisis at the level of the nation-state, i.e., so far as it can be conceived as a national crisis. I will now summarize these different levels of analysis and their relations.

##### 6.1.1 The Capitalist Basis

As far as the explanation of crisis is concerned, three integral aspects of capitalism are of essential interest to us. The first of these, the law of value (which has both logical and historical priority), is fundamental to commodity exchange. The law of value states that the ratios in which commodities exchange, or their values, are determined by the socially necessary labour-time for their production. With this law we put the circulation of commodities on a more or less rational basis, whereby the exchange of commodities is determined by their values.

The second aspect is fundamental to capitalist circulation, and that is the drive to accumulate. Wherever material resources act as capital, their circulation yields a greater value than was originally thrown in. Capital is value in search of expansion, and thus thirsts for accretion.

Now, it is clear, on the one hand, that given the equal exchange of commodities (i.e., in accordance with the law of value), the drive to accumulate can express itself as profit only if the circulation of commodities increases the socially necessary labour-time for their production. It is equally clear, on the other hand, that a commodity by its circulation cannot effect the labour-time expended in its own production. To yield a profit under these conditions, commodity capital must not only circulate but also produce a new commodity of greater value. Thus, production must be a phase in the circuit of capital, where the value of labour-power consumed is less than the new material value it creates in the new commodity, i.e., it creates surplus-value. When the law of value which governs commodity exchange is joined by the drive to accumulate which governs the circulation of capital, i.e., where commodities begin to circulate as capital, this must give rise to production in the capitalist mode. This type of production depends primarily on the private ownership of the means of production or, where these are already commodified, on the ownership of money. Where private property prevails, a class of person arises which has no access to the means of producing their material life, and therefore no access to means of subsistence, except through the sale of their labour-power to the owner of capital. From that point, production may yield a capitalist profit.

The privatization of productive resources as capital, however, not only opposes the owners of capital to the non-owning classes, but it naturally opposes one private owner to another. The total social capital is thus applied as a single social force only in a limited sense, and we may more readily perceive the third fundamental aspect of capitalist production - the anarchy of production.

The anarchy of production refers to the unco-ordinated and haphazard way in which social production is matched to social demand under capitalism. Where each capital is applied as an independent force to further the private accumulation of wealth, the result will be the movement of capital wherever profit beckons. But since this is an open invitation, many hungry capitals will crowd into a branch of industry, increasing production above demand and the rate of profit will consequently fall. Over time, and across society, this flux shows the limits to the rationality of production on a capitalist basis.

### 6.1.2 The Causes of Crisis

Now these three essential underlying elements of the capitalist system of production (the law of value, the drive to accumulate and the anarchy of production) periodically express themselves as growth, progress and prosperity, and periodically as contraction, regression and poverty. It is not the case that something has interfered with the system when prosperity turns to decline. Rather, the phase of prosperity lays the ground for decline, and vice versa. We now come to the mechanisms through which the underlying laws of capitalism express themselves as crisis. The first of these mediating processes is the tendency for the rate of profit to fall.

On the basis of the law of value and the private ownership of the forces of social production, the drive to accumulate must express itself as a constant tendency for the development of the forces of production. Where the value, and ultimately the price, of a commodity is determined by the labour-time socially necessary for its production, the interest of each capital lies in the reduction of the labour-time expended in the production of its commodities as far as possible below the average. In this way, the cost-price of the individual commodity falls below its socially recognized value, and the margin of profit is expanded. The reduction of the labour-time expended in the production of the individual commodity depends on the productivity of labour in a given capital being better than the social average. This again depends on the improvement of means of production in one case as measured against the average.

However, since all capitals face each other as adversaries, none has any interest in allowing another to retain superiority in the productivity of labour. Therefore, as one improves its means of production, others follow, and the result is a general development of productive forces. As the more and more advanced means of production are introduced, the proportion of the value of the total capital advanced that goes to constant as opposed to variable capital increases. Marx calls this the rising organic composition of capital. The diminution of the labour-power component of production reduces the basis of surplus-value extraction. Regardless of whatever counter-valencies may arise to temporarily, or permanently, allay the falling rate of profit, there is always a tendency for the rate of profit to fall. This pressure must be averted at all times (e.g., by raising the rate of surplus-value), and in times of crisis when other pressures bear heavily, the ability of capital

to maintain the rate of profit is severely strained. Where the rate of profit falls, the "natural" 'tendency of the rate of profit to fall' is always a contributing factor.

The second mediating process is the disproportionate development of the two departments of social production. The possibility of unbalanced growth arises from the anarchy of production. The particular way in which the rates of accumulation of the two departments is related over time is determined by the drive to accumulate.

The structural relation of the two departments is of great importance in reproduction. First, Department II purchases means of production from Department I. Second, the workers of Department I purchase consumer goods from Department II, including that portion corresponding to surplus-value. Now, while the logical requirements of the system include the articulation of the departments according to this schema, and an interlocking input-output structure, the disarticulation of the capitals in the different departments, and therefore of the departments as a whole, due to the anarchy of production, prevents this departmental balance. Even given the desire to fulfil the functional requisites of the system, the privatization and accompanying fragmentation of social production would make this a matter of chance and accident.

In reality, no such 'desire' exists. The governing principle is the drive to accumulate, which expresses itself in the movement of capital into whichever department is momentarily more profitable. Now, if Department II is expanding, business confidence is high and turnover is good, the orders will flow to Department I at an ever-increasing rate. The production of Department I at this time corresponds to the productive consumption of Department II in the next turnover period. Department I therefore expands more rapidly than Department II and capital will flow in here. This will mean that the labour army of Department I is expanding, and this will expand the market for consumer goods. However, when the production of consumer goods gathers pace, it inevitably outstrips the consumer power of the working class (more on which below), and so production slows, competition intensifies and prices drop. Orders to Department I also decline. Because it is producing means of production for the next, expanded round of accumulation, the contraction experienced in Department I as a consequence of this is greater than that in Department II. Therefore, as orders for means of production contract, the buying power generated among Department I workers declines even more.

Capital now evacuates Department I and is moved partially into Department II, partly turned to speculation, and some of it provides credit to either capitals who intend to carry on, or consumers who wish to continue buying consumer goods.

When the consumer good market is eventually cleared, Department I is at its lowest level. As Department II expands again, it buys up means of production which were unsold in the recession. As these stocks run out, Department I production again falls below demand, there are shortages, prices rise and capital flows in.

The third mediating process is underconsumption. This effects the realization of the value produced in Department II. Where the law of value operates, it is clear that surplus-value can arise only when the labourer is set to work for a longer period than is necessary for the reproduction of his or her labour-power. Hence, the total value produced in Department II cannot be realized without the consumption deriving from Department I workers. However, if we introduce anarchistic production and a profit motive, which raise the organic composition of capital in the way described above, then the demand generated by Department I will fall as against its production of means of production. The extra means of production produced in the increasingly labour-efficient Department I will themselves have the potential to produce more goods with less labour, and thus, as production grows, demand for consumer goods must shrink relatively.

In order to maintain consumption, the expansion and capitalization of Department II must proceed more slowly than the expansion of Department I, as this latter department will have to expand exponentially to generate additional consumer demand arithmetically. Such is the situation in the period of economic boom. However, the very motive which would recommend this, i.e., the profit motive, pre-empts its actualization under conditions where each capital stands opposed to the others. Each capital knows that if it regulates its expansion it will be left behind, and it would rather suffer underconsumption alongside all the others.

The fourth mediating process is the over-accumulation of capital. Where the mis-matching of production and demand is the norm, there will usually be an oversupply or a shortage of any given commodity. The fact that all capitals, and capital as a whole, strive to accumulate means that there is a greater likelihood of over-production than under-

production at any given time. In this way, production for private accumulation tends to outstrip social demand. When demand falls below supply in Department II, the rate at which commodities can be profitably produced declines. More capital has been accumulated than can now be profitably employed. This over-accumulation occurs because each capital, independently seeking profit, has sought consistently to expand and increase its labour productivity such that the aggregate capital now lacks opportunity for valorization.

So Department II has too many means of production. This simultaneously signifies that Department I will have difficulty in realizing its produced value, or selling its produced means of production, and, pro rata, that it too has accumulated too much capital. The three forms of means of production - means of production of Department II, unsold products of Department I, and means of production of Department I - are all in excess. Hence, value existing in all other forms must also now be in excess if it is applied as productive capital, and will only worsen the over-accumulation of means of production.

### 6.1.3 The Expressions of Capitalist Crisis

There are many symptoms of the crisis at the level of the 'community of capitalist enterprise'. The following are only the most characteristic and unmistakable results of the causes described above.

The first is the falling rate of profit. The general rate of profit is probably the most significant phenomenon in the capitalist economy. It indicates the rate of accumulation and thus the general health of the system. We have seen that there is a tendency for the rate of profit to fall under capitalism. This is expressed as a trend of falling profit in the longer-run. The reconstitution of capital from which imperialism (1890) and late capitalism (1940) emerged brought about historical revivals in the general rate of profit through the discovery of new sources of surplus-profits necessitated by the falling trend.

In the shorter term, fluctuations in the rate of profit have more obviously combined causes. These fluctuations signify changes in the rate of accumulation and in this way describe what has been termed a regular industrial cycle. We saw in Chapter V how this is determined. Briefly, underconsumption hits Department II for the reasons set out in the subsection above. This causes contraction, which sets up a disproportion in



favour of Department I. At this point the rate of profit is falling in Department II. The over-accumulation of capital in that Department means that orders going out for means of production decrease, and this leads to problems of realization and then valorization in Department I. The over-accumulation of capital here, now swings the disproportion in the opposite direction as Department II carries on business with existing means of production (albeit at a very slow pace), whereas Department I cannot now sell its products to the contracting Department II. At that point the rate of profit in Department I has fallen to its lowest level, below that of Department II. Contraction in the capital goods department means unemployment and thus the reduction of aggregate wage-demand, while the per-person wage, and thus the rate of surplus-value, has not had time to adjust to the crisis (wages should fall, raising the rate of surplus-value). This again keeps the rate of profit low.

In line with the changes in the rate of profit, the second expression of crisis is the contraction of industry and industrial output, and this means, thirdly, redundancies and the expansion of the reserve army of labour.

In a crisis, then, we see, fourthly, the pressure for wages to fall in line with the needs of capital. The rate of wages is regulated through the expansion and contraction of the reserve army of labour, and so as this grows, wages must fall. This law, however, works itself out in the class struggle at the wage-bargaining table, on the picket line and at the barricades, which colours the period of crisis.

Fifth, capitals experience problems in realizing their produced value. This appears as stock piles of unsold commodities. This is partly due to underconsumption (Department II), partly to over-accumulation (causing realization problems in Department I), and partly to general overproduction, i.e., that portion of overproduction present in both departments even in expanded reproduction.

Sixth, idle capital arises directly from over-accumulation. This may take the form of idle means of production, plant closures, or the withdrawal of capital and its movement into, for instance, gold bullion. Alternatively, the excess material goods of an unprofitable sector may be bought up cheaply, or the whole capital annexed by a more powerful company. This leads to the concentration and centralization of capital, and its various market appearances, e.g., takeover bids on the stock exchange.

Seventh, in a serious recession, such as the current one, instead of falling with the rate of expansion, interest rates stay high. This signifies that credit expansion has become the basis of stagnation, and is the only thing preventing decline and destruction of capital.

Finally, with continuous credit expansion, the devaluation of currency produces rising prices. Couple this with declining profit, and the result is increasing credit-need. Couple rising prices with credit expansion, however, and it is clear that inflation, once present in the economy, develops on a spontaneous basis.

#### 6.1.4 The National Crisis

These expressions of the crisis are felt by capital generally. They are perceived as equally pressing problems by all capitals, capital as a whole, and capitals in different countries. Another set of closely related problems faces the state, which looks over the flock of national capitals in each country. The 'national crisis' is a specific composite expression of the capitalist crisis.

Just as the low level of the rate of profit signifies that the general health of capital is poor, so its expression at the national level, little or no 'economic growth', indicates the status of the national economy. When the rate of profit is low, economic growth is retarded. Primarily, this indicates that insufficient capital is completing its circuit, and this cannot be reinvested at the normally expanded rate. In addition, however, it may also mean that the money which is available will not be invested because of a lack of confidence in its profitable return. The level of business confidence never determines the rate of accumulation; it is, rather, the dependent variable.

Two further expressions of the crisis at the national level involve the inability of the national capital to realize its produced value. They are the need to improve the balance of trade situation, and the growing unemployment problem. Where stagnation results from over-production and glutted markets, the improvement of foreign trade is an obvious release for the swollen values which clog the circuit of local capital. The role of the state in marketing exports and fostering marketable export production comes to the fore in crisis. The markets at which the government aims are in those countries whose 'natural' rate of accumulation is above average. At home, of course, the larger the reserve

army, the smaller the number of labours employed, the further aggregate wage-demand declines. The state tries to ensure that demand sits at a certain level with special work schemes. About 37% of the reserve army in New Zealand, for example, was on special work in December 1983.(1)

The state also mediates the general law that wages move inversely to the size of the reserve army of labour. Thus, negotiations and disputes between the state and unions increase and intensify.

The major means of dealing with the crisis which the state uses are Keynesian policies of expanding the money supply to support the national economy until the rate of profit picks up independently and allows a new round of accumulation. These may lead to two final difficulties. The first is a balance of payments problem. When the level of credit support in the national economy is such that repayment is deferred for several years or several cycles, without an upturn, loans and interest accumulate and must be refinanced. This continuous expansion of credit is inflationary, and this is the second problem. As credit expands, more businesses are kept afloat without more capital completing the circuit. At the same time, the inflationary effects of this raise prices, which strains the ability of firms to stay in business, which necessitates further credit, and so on.

## 6.2 WHERE TO NOW: SOCIETY?

The linkages drawn from the capitalist base to the other levels of social reality, and the phenomena which occur at each, constitute the connecting thread that explains the crisis on a capitalist basis. Once we have an idea of the causes of crisis, it is possible to see its function in the general development of capitalist production. When the function of crisis is understood, the conditions of recovery may also be derived, and the likelihood of these developing can be evaluated.

The crisis of capitalist production expresses itself as contraction. This is because of the over-production of goods under capitalism, which becomes a cause of crisis. Accompanying the contraction of production are two correlated expressions of the crisis - falling prices and bankruptcies. Both of these phenomena help to mitigate over-production. Lower prices help to clear markets, and bankruptcies reduce the potential to keep them saturated or to glut them again.

Falling prices and bankruptcies are phenomenal forms of the devalorization of capital. That is, they are ways in which the market presents the wastage and annihilation of socially produced value - value which will never be socially recognized. The valorization of capital is the transformation of commodity capital into a new commodity of greater value in the capitalist production process. Devalorization is the undoing of this process. It is the loss of value, destruction of values and the inability of capital to act as such. Falling prices and bankruptcy are not the only expressions of this. Others which I have already dealt with include idle capital and depreciation of means of production through weathering.

The devalorization of capital is the underlying meaning of these phenomena. The fact that many of the phenomena of crisis should serve the process of devalorization is not surprising, for we saw in Chapters IV and V that both the tendency of the rate of profit to fall and the imbalance of departmental growth rates persist even in the recovery. The crisis essentially consists in the over-accumulation of capital and the inability of the working class to increase consumption (monetarily effective demand) at the same rate as accumulation. These are the two sides of over-production which lower the rate of profit, retard accumulation and necessitate the devalorization of excess capital in the crisis. The destruction of capital is thus the objective function of crisis.

The recovery from the crisis would involve the raising of the rate of profit and thereby the achievement of higher rates of accumulation. First of all, this will require that the commodity stocks are cleared, and this will in turn mean that production must have contracted and prices fallen. Under these conditions stocks should be moved, and as production continues to contract, it will eventually fall below demand.

Or will it? If production is declining, then unemployment is growing and aggregate wage-demand is falling. The less products that are made, the less the demand for them, and the smaller the absolute demand for the stockpile of a prescribed size. Under these conditions the excess production cannot be dissipated through the normal channels, and so part of the excess capital must be destroyed, and here is the role of the devalorization of capital.

With the expansion of the reserve army of labour, there develops downward pressure on wages. This seems at first paradoxical, since wage-demand would thereby suffer independent of unemployment. But this reduction in wage-demand is accompanied by a pressure for the rate of profit to rise as the rate of surplus-value improves. Therefore, it simultaneously induces not merely devalorization but ruin of a percentage of firms, on the one hand, and tends to raise the profit rate of the survivors, on the other. In this way, the weaker firms are weeded out, and the stronger go from strength to strength. The surviving firms are not affected by the additional unemployment because it represents a smaller demand than the bankrupt capitals' supply. Indeed, the addition of further unemployed forces wages further down, and the rate of surplus-value further up. This whole process will continue until general supply falls below general demand.

At the point where demand exceeds supply, the remaining capitals with a higher rate of surplus-value can begin to expand production again. The productive base is now trimmer as prices begin to rise. As more capital gradually employs more workers, wage-demand grows and may for some time run in advance of production, for it has a head start. Demand for money has been low, and now increases to finance new investment. With this investment-demand, Department I begins to expand, and the general recovery is on its way.

The foregoing covers the general case of crisis and recovery, and treats the problems of capital in general. Now we must take several complicating factors into account to understand the possibilities of the current crisis in New Zealand.

The recession of 1974-75 was the first generalized recession seen in the capitalist world since the Second World War. During the long post-War boom, individual countries suffered fluctuations in their economic indicators, or even in some cases stagnation. But these phenomena were never synchronized, and were certainly not general.

Where a series of national economies is experiencing periodic, unsynchronized recessions, Keynesian economic policies can act well in the national interest, or the interest of national capital. When over-production occurs and the rate of profit falls, the state expands the money supply to create consumer and investment demand. In this way none of unemployment, wage reductions and devalorization need stand out as

corrolaries of the clearing of the market. When the market is cleared, and the real rate of profit begins to pick up (the nominal rate of profit has remained high), the additional money is pulled out of circulation through the repayment of bank over-drafts, mortgages and loans, hire-purchase, and through taxation where government inputs were direct, e.g., purchase of excess commodities, subsidies and grants, etc. Through the whole of the crisis, it is likely that trade would be maintained or even increased since the national down-turns are unsynchronized. This again helps to disperse the force of the crisis as the valorization of export industries helps to prevent the devalorization of capital partially or totally geared to the domestic market.

Now when considering the general case of crisis I ignored the division of production into national capitals. When recessions are unsynchronized between nations, they appear as exclusively national in character and significance; they are internal events, and the intervention of the state is inevitable. However, where the recession is generalized, it is conceivable that both the underlying crisis and the recovery might lie totally outside a country, while only its effects are felt at home, i.e., through the contraction of trade. This requires, in the first place, the existence of a world market which reaches saturation. Whether or not a given crisis can be conceived as external depends, secondly, on whether other countries bear the brunt of the crisis, or whether this country provides its share of the capital to be destroyed. It does not matter which capital is devalorized, only that sufficient capital be devalorized. So it is conceivable that the capital of one country may survive at the expense of another national economy.

The national capital is thus thrown into an endurance race with other countries, where the state is the coach, cheer-leader and water-boy. This situation arises because it is not necessary that each nation suffer its fair share of devalorization, and so each tries to put it onto others. This is done by: 1) propping up one's own economy with credit, and 2) erecting trade barriers.

When conditions of generalized recession came into force, the New Zealand government continued with its Keynesian policies. But conditions had changed. First, the revalorization of capital required the clearance of the world market, which meant that recovery did not necessarily follow from stimulation of the national economy. Second, since there was a general excess of commodities, export trade could not be counted on to

provide investment demand, employment, or any other form of national economic growth. Third, the stimulation of investment demand would be particularly fruitless because with no market at all, investment could not possibly conjure accumulation as it seemed to have done before. Rather, the generalized recession signifies that there is little or no accumulation to warrant investment.

In other words, the generalized recession signalled that all efforts to tide over the national economy were doomed, for there would not be, and could not be on the basis of such policies, anything to tide it over for. It has degenerated, in fact, into a test of endurance, with each nation trying to outlast the others on the slide to poverty, misery, instability and uncertainty. When enough countries have 'gone under', i.e., had their surpluses rot, destroyed by war, etc., then the surviving countries may experience a rise in the general rate of profit. This, anyhow, is the consistent goal of the capitalist nation-state.

The current crisis in New Zealand must be understood in the context of the inability of Keynesian-type policies to contribute to the mitigation of the 'national' crisis as they did in the long boom, primarily because the crisis is now a world-wide capitalist crisis.

Since there is nothing to tide the national economy over for, credit expansion is objectively merely a means of maintaining stagnation! The result is therefore 'stagflation'. This has perverse effects on the national capital, as rising costs must be sustained on the basis of zero-growth or worse. That requires more credit, and so on. Hence, inflation begins to develop itself spontaneously in a cost-push spiral.

In the case of capital in general, we saw that unemployment in the crisis is of no particular concern. Unemployment, in fact, is only a concern to the state, and then only in a generalized recession. Where a nation stands opposed to other nations, it wants to maintain a large percentage of its capital. It does not want to stick to the scenario of contraction, unemployment, falling wages, bankruptcies, and higher surplus-value for the survivors. It wants the country as a whole to survive, which means it wants to minimize contraction and keep employment and demand up to ensure the valorization and realization of the greatest possible capital by the 'normal' means. Of course, this requires credit for the capitals and special work for the unemployed.

With a large reserve army of labour, there is pressure for wages to go down. Yet, again, the reduction in the rate of wages only serves to prop up the flagging rate of profit, does not reduce demand or knock out national competitors, and cannot assist the international devalorization of capital nor, therefore, the clearance of the market and the valorization of capital as a whole. It does not serve a positive role; it merely serves to draw the devalorization of the national capital out longer, and in so doing forces other nations to follow suit.

Finally, we come to the rate of interest. The normal credit cycle associated with the ups and downs of the system peaks where expansion is greatest, and money is needed to purchase means of production. At that point the rate of interest peaks, with demand. When a crisis is deep and drawn out, as the present crisis is, demand for credit tends to be more steady over the cycle, as credit money is now used, not only for expansion, but primarily to finance survival and stagnation. This means that at the beginning of an expansive phase in the cycle the rate of interest has not fallen to its lowest level and may even be above the rate of profit. Therefore, where trends in accumulation should stimulate bona fide productive investment, the owner of money tends to become a lender, turning this money into stagnation-supporting credit (stagflation). If he becomes a producer, he will have to borrow funds to expand, which would mean paying a rate of interest higher than the rate of profit, rather than receive it.

Now we must distinguish between the short and the longer-run possibilities of the New Zealand economy in a generalized recession of the capitalist world economy. Short-term possibilities are presented by the fact that the industrial cycle continues throughout the generalized recession, although it seems less marked. The causes of the industrial cycle must still operate, but in a limited way. Some portions of the market are cleared, some capital is devalorized, wages in certain sectors fall. As some domestic markets clear, the rate of profit may begin to rise in these sectors. Certain international markets may also free up; more money thus becomes available, and international trade begins to pick up. To receive the advantages of an up-turn in the industrial cycle, a nation-state must manipulate three crucial variables: 1) the rate of interest, 2) wages, and 3) the rate of inflation.

The object of the state in the short term is to ensure that a round of investment coincides with the up-turn in the cycle. Under 'normal'



conditions, the clearing of markets would lead to a rise in the rate of profit and the rate of accumulation. This would encourage investment, which would be profitable and would lead to expansion. In a generalized recession where nations stand opposed, however, things are different. The first important difference is that portions of the market have been cleared without corresponding devalorization of capital because, put simply, the government has propped firms up. Second, the pattern of wage movements is no longer straightforward because unemployment is not as great as it would 'normally' be, special work is extensive, and redundancies are unevenly distributed between sectors. Wages must therefore be depressed in selected sectors, almost artificially by the state. There may be difficulties in this, as it is precisely the expanding productive sectors where wage-cuts are desirable. These two factors, trends in devalorization and wages, mean that the rate of profit does not pick up in the normal way when the market is cleared.

The third important difference is that falling prices are no longer the general trend. Prices now fall only where capitals are on the verge of bankruptcy or in other extraordinary cases, e.g., where a monopoly breaks down. The general trend is one of price inflation. Hence, where the market is clear, new means of production are not cheaper than they have been, but dearer. This tends to discourage investment. This is particularly damaging to expansion when coupled with the fourth factor - high interest rates. Not only is the increase in the rate of profit slight and the cost of re-tooling high, but on top of this it is hardly worth borrowing money to purchase means of production.

The short-term possibilities for recovery thus depend upon the ability of the state to reduce wages, lower the rate of interest and hold inflation - all in selected and correctly related sectors at the same opportune time. There is every indication, in my opinion, that the current New Zealand government and the opposition Labour Party, are aware of these requirements and can more or less contribute their part to the realization of the short-term possibilities of the New Zealand economy. I discussed in the body of the thesis how the 1982-84 wage/price freeze, 1983-84 interest rate regulations and negotiations, implimentation of youth rates, changes in the state pay fixing procedure, the Industrial Law Reform Act ("voluntary unionism") and, one might add, the projected renegotiation of general wage-bargaining procedures, were the most unmistakable results of this. I have no doubt that under the present

management the New Zealand economy can achieve its short-term potential, such as this is.

The particular forms of state intervention relating to short-term recovery are determined by the longer-term policies of the state flowing directly out of the generalized nature of the current recession. Regulation of interest rates, wages and inflation all become necessary because their 'natural' adjustment in the industrial cycle is pre-empted by the longer-term anti-devalorization policies of the state.

As far as the longer-term prospects for New Zealand are concerned, they are at best uncertain. This applies to all capitalist countries. When I say 'uncertain', this does not imply that the analysis has failed to find the determination of economic events. On the contrary, in the longer term it is clear that the capitalist economy will stagnate and continue to run down. Countries will begin to suffer ruin, poverty and misery where it was not present before. But this economic certainty signifies political unpredictability, or at least has political implications not revealed by the economic analysis as such. It is clear that the material life of social groups, national populations and humanity as a whole cannot decline beyond a certain point without provoking epoch-making events on a national and international scale. There is, moreover, firm historical precedent for this view. As capitals, capitalist nations, blocs and the world system grow weaker, everything is "up for grabs" in the political arena. These struggles over the control of the state, and thus economic resources, may take the form of inter-imperialist war, civil war, tendencies to dictatorship, national liberation struggles and revolution. The outcome of these events is another story.

### 6.3 WHERE TO NOW: ANALYSIS?

Once we had seen the general explanation of crisis in Chapter IV, I turned in Chapter V to some more specialized issues. The first of these was the periodicity of crisis under capitalism, which gives a cyclical appearance to the trends in the rate of accumulation. I tried to show why the development of capitalist production should present itself as an industrial cycle. Once we had an idea of why this is the case, I began to look at some factors involved in the determination of the frequency, amplitude and shape of industrial cycles and trends over several cycles, for example, of successive cycles sinking into depression.

There are two aspects in this which come to the fore in anticipating further work on the topic of capitalist crisis. The first is the development of a conception of cycles which arise in relation to the industrial cycle. We have already come across the credit cycle, and others are discussed below. The second is the study of the articulation and trends in successive cycles which relates to longer-run economic movements

The industrial cycle in its normal, uncomplicated form can be summed up as the periodic over-production of goods and over-accumulation of capital which must be cut back to the point where demand exceeds supply, where profitable investment may resume.

When the capitalist economy was released from the gold standard, a credit cycle arose which was articulated with the industrial cycle, peaking in the expansion where the demand for money to finance investment was greatest. In the generalized recession, the credit cycle has become disarticulated from the industrial cycle, and the demand for money persists in the low part of the cycle as capitals seek 'bridging finance'. The state decides to allow this in the interests of the nation, and stagflation results. The rise and fall of the credit cycle is thus the theoretical base from which to understand the historical development of inflation, stagflation, deficit financing, late modern fiscal policy, fiscal crisis, state regulation of banking, foreign-exchange crises - in short, all monetary policy and regulation of the state.

Since New Zealand capital is primarily located in one department - Department II - inter-departmental exchange occurs mainly through foreign trade. This means that New Zealand capital must realize its surplus-value on export markets and that the overseas funds realized in this way should ideally go to the importation of means of production. Thus, over-production for New Zealand capital is relevant to its share of foreign markets or the world market. When trade is good, New Zealand capital can expand. If foreign markets contract, New Zealand capital contracts. In this way, the industrial cycle in New Zealand is transformed into a trade cycle, which corresponds, not to national departmental disproportions, but to the status of the capitalist world market. The determination of this 'status' is a much more complicated problem than the calculation of national disproportions where the ups and downs of trade are incidental.

The trade cycle is, in the first place, articulated with the industrial cycles of our major trading partners. In the long boom when recessions were not generalized, all the combinations of the ups and downs of our major trading partners would have produced a multitude of possible outcomes for New Zealand. The articulation of the industrial and trade cycles is further complicated by time-lags in covariance of national rates of accumulation and the size of markets in other countries, by travelling times of goods, and by the lag between the contraction of trade and the restriction of output at home.

In the generalized recession, the trade cycle evokes opportunism in the sale of commodities on the world market. Outlets are sort wherever incidental fluctuations raise the buying power of a potential trading partner above average. The decimation of the trade cycle in generalized recession is the basis from which to explain the development of trade and the rate of accumulation in New Zealand.

The analysis of the development of capitalism in New Zealand becomes even more specialized, however, because of the large proportion of exports consisting of agricultural produce. This transforms the trade cycle into a fourth, and final, type of cycle - the agricultural cycle - which is affected by the ups and downs of the food-producing branch of industry on a world scale. Trends in the production and over-production of the world's food supply are thus major variables in the analysis of New Zealand.

The setting out and drawing together of these four cycles is a complicated task that could not be attempted here. This thesis was couched at a more general level, but on its basis the analysis of cycles will yield a fuller understanding of the short-term developments in the New Zealand economy.

In the longer-term, it is not the characteristics of any particular trade cycle which are of interest to us, but the trends in these. The articulation of successive industrial cycles into, for instance, a depression or a long boom must have determinants which stand outside and over the determinants of any particular cycle.

The most fruitful approach to this problem it seems to me, lies in a body of literature on the 'long waves' of capitalist development, including such authors as N. Kondratief, L. Trotsky, and latterly, E. Mandel. A brief history of the theory, and further references can be found in Mandel's Late Capitalism, Chapter 4.

The analysis of long waves tries to come to grips with the longer period of oscillation in the rate of accumulation of approximately 50 years. The explanation of long waves must be in terms of elements of the analysis which are involved in the turning of the industrial cycle, but which are not totally mitigated at each turn, and accumulate over several cycles. These might include the tendency for the rate of profit to fall, the over-accumulation of capital as finance capital over several cycles, the credit extended by the state, the decreasing turnover time of capital, etc. If such factors were worked out and synthesized, an explanation of long waves could be attempted, which was too big to attempt here.

Finally, we must return to the official view of capitalist development and compare it with the conclusions reached here. This will reveal another field of inquiry which follows from this thesis.

In the first quarter of 1984, the recovery of the capitalist economy, which only crawled through 1983, seems to have finally realized itself in Britain, the U.S.A, as well as in New Zealand, judging by the latest reports.

On the 14th of March the British Chancellor of the Exchequer, Mr Lawson, read a budget which "...he said would stimulate business, reform the tax system and give the Prime Minister, Mrs Thatcher, fresh artillery in the war against inflation." (2) According to a report from London the British government had just released figures showing that industrial production was at its highest level in four years. The budget can thus be interpreted as an attempt to ensure that investment coincides with an improvement in the rate of accumulation. The budget is reported to have kept credit sparse to hold inflation, eliminated special allowances for investment and insurance plans and stimulated directly productive investment by halving a stamp tax here, exempting corporate bonds from capital gains tax and abolishing a surcharge on investment income. (3) This programme of stimulation might follow from the analysis of the short-term situation presented in this thesis.

The report makes no prediction about the longer term. The furthest Mr Lawson would go was to plan a reduction in corporate taxes in the 1986-87 period, so he expected accumulation to continue at least until then. Thus, almost the sum total of the budget was short-term.

At the same time, the Americans were experiencing a bigger up-turn, and were very optimistic about the future:

"It is clear to us that the nation is set on a strong economic course for 1984," White House spokesman Mr. Larry Speakes said. "We are poised for economic expansion of the kind that puts to work and sets the country on a proper economic course."(4)

The report from Washington made the following predictions:

The latest economic news also demonstrated that a long awaited business spending boom had finally occurred, setting a record-high level for investment in modernization and expansion.

The increase in housing starts was bouyed by two other major reports showing advances in industrial capacity use and in personal income during January.

These figures provide new evidence that the components of last year's solid upturn remain in place. Strong consumer demand has been providing the impetus for boosts in production and as this continues the capacity for utilization moves ahead.

This paves the way for the next stage of the recovery - fuelled by increased investment in production and plant by businesses, as demand continues to outride supplies and eat into the already-low inventories kept during the recession years.(5)

Thus, it seems that the same upturn in the trade cycle was being felt in both the U.S. and Britain. The jubilation of this news report belies the fact that it really concerns itself only with the current year. No mention or prediction is made for next year, and the long-term development is ignored.

In New Zealand the most dramatic recent announcement was the decline in the rate of unemployment, including those on special work, in February. The figures fell from 131,723 to 118,433, a drop of 13,290, or more than 10%. At that rate, there would be no more unemployment in nine months time. This reduction in unemployment was related to an increase in business confidence according to the Minister of Labour, Mr Bolger.(6) If this is the case, we would expect it to be related, in turn, to an increase in the rate of accumulation.

The striking thing about all of these reports is that they accept the heavenly gift of economic resurgence but have no explanation of it or any idea of future developments. Why are these questions avoided?

The primary reason is that official science poses only such problems as it can solve. This set of questions is growing smaller and smaller as bourgeois economics must increasingly ignore evidence of the type of analysis offered in this thesis. Politically, it would be an intolerable

conclusion that, aside from incidental fluctuations, the future holds a continuing downward trend bringing misery, poverty, uncertainty and helplessness to the great majority of the world's population, including the majority of those in advanced countries, so long as capitalist development continues. Where material life hangs in the balance the stakes are high, and people recognise this. There is no alternative for bourgeois science but 'to disappear' these facts with silence.

From this point of view a whole new set of questions arises. Once we go beyond the short-term account of economics we find no long-term solution to the current crisis. That is, there is no solution that emanates naturally from capitalism as the crisis does. The solution to the crisis will not be economic in nature; it will be essentially political, and it may involve a fundamental revolution in human society. There seem to be at least three possibilities in the long-run. The first is the forcible destruction and reconstitution of capital, which we have seen will not occur automatically. The second is the destruction of human civilization, and its degeneration into barbarism. The third is the rising of the working class in international socialist revolution.

The immensity of these possibilities indicates the need to develop a political analysis of social development on the basis of our economic analysis. The latter should continue to provide the guiding thread for this specialized work, as it is the economic questions from which we start. As economic problems become more pressing, however, the political analysis should begin to develop on a spontaneous basis, with the object of gaining power in order to put in force an alternative economic organization of which crisis is not a natural aspect.

## NOTES TO CONCLUSION

1. In December 1983 the registered unemployed numbered 81,062 and those on job creation schemes (both public and private sector) 47,478. The latter as a proportion of the total amounts to 36.9% - Monthly Employment Operations published by the Department of Labour, Wellington. Dec, 1983.

2. New Zealand Herald 15 March, 1984.

3. Ibid.

4. Auckland Star 14 March, 1984.

5. Ibid.

6. New Zealand Herald 14 March, 1984.



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